Address
ON
VERTIGO OF BULBAR ORIGIN.

Delivered before the Harveian Society of London at the Annual Meeting, Jan. 16th, 1890,

BY THOMAS BUZZARD, M.D., F.R.C.P.,
PRESIDENT.

GENTLEMEN,—It is well known that vertigo is a symptom which may occur in connexion with many conditions. With epilepsy, for example, in cases of oculo-motor paralysis, in disease of the cerebellum, in states of nervous exhaustion, or as a result of gastric disorder. We owe to Ménière our knowledge of the fact that vertigo of apoplectiform character, which was previously supposed to denote grave disease of the brain, may be dependent upon a strictly localised lesion of the labyrinth or internal ear. The bony structure of the internal ear is hollowed out, as you are aware, into three divisions, the vestibule in the centre, communicating in front with the cochlea, and behind with the semicircular canals, on the outer side with the tympanic cavity by a hole which is filled by the base of the stapes, and on the inner side with the internal auditory meatus. The membranous labyrinth lines more or less loosely this bony structure. Omitting details, it contains a fluid called the endolymph, and its walls support minute ramifications of the auditory nerve. In case of injury to the semicircular canals or their contents it is not the sense of hearing which is damaged, but a disturbance of equilibrium is occasioned. It is now, I suppose, very generally agreed that the function of the auditory nerve is twofold. By its distribution to the cochlea it is the nerve of hearing, and according as this portion of the nerve is stimulated or its structure damaged it will give rise to sensations of sound or to more or less hardness of hearing. By its distribution to the semicircular canals the movements requisite for preserving the equilibrium of the body are influenced. The functions of these two divisions, then, are perfectly distinct. A disease of the bone, or of its membranous lining, will interfere with both or either of the functions, according to the extent to which the distribution of the auditory nerve fibres to both the cochlea and the semicircular canals, or to either alone, is thereby affected. It is evident therefore that as a result of disease in this region we may find more or less severe vertigo, accompanied, if the cochlea be affected, either by noises in the ear, or by greater or less deafness, and sometimes by both.

I am sorry to be obliged to detain you by reference to these points, but it is necessary for me to do so in order that the line of my argument, if so it may be called, may be intelligible. Ménière's important exposition has extraordinarily influenced the diagnosis of vertigo. Paroxysms of vertigo, occurring in a person of previously fair health and accompanied by deafness or subjective noises, are now constantly being attributed to disease of the labyrinth. In the large majority of these cases the most careful examination discloses no evidence of disease of the outer or middle ear. Where some deafness exists, however, it is found that the tuning-fork is heard very indistinctly or not at all when placed on the vertex, but better when held opposite the external meatus. These characters tend to show that the nerve of hearing is in itself in some way implicated in disease. In these circumstances it is customary to suggest that inflammation, hæmorrhage, or effusion has taken place into the labyrinth. Should, however, there be evidence of disease in the middle ear, or obstruction of the Eustachian tube, or irritation or obstruction of the external auditory meatus, it is concluded that the labyrinth is indirectly affected. In either alternative, then, the immediate cause of the vertigo is ascribed to a lesion within the labyrinth.

Now, I have myself no doubt that paroxysmal vertigo, accompanied by deafness and singing in the ears, is sometimes occasioned in this way. Either directly or indirectly, an affection of the membranous or bony labyrinth causes irritation of the auditory nerve-endings and consequent disturbance of equilibrium, deafness, and tinnitus. In all cases, indeed, in which vertigo is accompanied by these symptoms, there can be no reasonable doubt that to the auditory nerve we must in some way or other look for an explanation. My impression, however, has long been (and this is the point which I wish to bring before you to-night) that in a large number—perhaps the majority of cases of auditory nerve vertigo,—it is through its centre in the medulla oblongata that the nerve is affected, and not at its periphery. I cannot help thinking that the ear is very frequently indeed accredited unjustly with the production of this kind of vertigo, and that, if we could examine the whole complicated apparatus contained in the temporal bone, we should discover no disease whatever in it. The point, let it be understood, is this: The fact that disease of the labyrinth is apt to give rise to vertigo, accompanied by disordered function of hearing, has been practically construed, as it seems to me, into the idea that all vertigo accompanied by auditory symptoms depends upon a local affection of the labyrinth. I believe this to be an error, and would look to the medulla oblongata, in which the auditory nerve has its origin, for an explanation of the symptoms in a large number of cases of auditory nerve vertigo.

Of the ten cases published in Ménière's treatise in one only was there an autopsy. The case was that of a young woman who had been exposed to cold whilst menstruating. She suddenly became completely deaf, and after suffering from constant vertigo and vomiting died on the fifth day. On post-mortem examination nothing could be discovered in the nervous centres, but the semicircular canals in each ear contained a reddish plastic substance. There are a few—a very few—confirmatory cases of autopsy by subsequent observers. These cases, whilst to my mind quite sufficient to establish the fact that vertigo of the kind we are discussing can be occasioned by an irritative lesion of the labyrinth affecting the auditory nerve-endings, entirely fail to prove more than that this is one mode in which the auditory nerve may be affected in cases of this description. The inference that this is always the explanation of this kind of vertigo appears to me to be quite unwarranted by the circumstances.

If you will bear with me I will try to explain the grounds which appear to justify this opinion. The subject is an extremely difficult one, as must always be the case where we have to do with disorders of this class. As physicians, we are called upon to give relief in numerous cases of disorder of the nervous system in which there is no distinct evidence of organic disease. They are, indeed, those in which our aid is most frequently of all invoked. In calling them functional disorders we only imply that the disordered function is what is observed, and of course the probable existence of an organic cause for the perverted action is not denied; indeed, I should rather say that this was taken for granted. The subject has an importance also beyond the mere interest attaching to the solution of a difficult problem, inasmuch as our means of treating a very common and distressing malady are on the whole likely to be useful in proportion to the success with which we master its pathology. Let me first refer to some examples, but I will make the accounts very short.

I was hurriedly sent for four years ago to see a medical man, forty-three years old, who had been lying seriously ill for two days. I found him in bed, and two medical friends who had been looking after him were with him. It appeared that two mornings previously he had woke up giddy and gone to sleep again. On waking again and getting up he fell down, looked extremely ill, and nearly fainted. He was got to bed, and there he remained for some weeks. So long as his head was kept perfectly quiet he was easy, but the slightest turn of the head brought on terrible giddiness. There was no deafness or tinnitus. He was away from work for many weeks, but returned well. He had been working again for some time when one day he was seized with faintness lasting a couple of hours, and accompanied by profuse sweating, and a similar attack occurred next day. In these attacks he did not lose consciousness, but felt as if his heart were not acting. Immediately afterwards he passed a large quantity of colourless urine. He described how in this attack, when he lay down and rested his head on the right cheek, he got an electric shock-like feeling, and dizziness, but if he "eased off" his head by supporting it first with a pillow and gradually turned his head round, he could avoid the giddiness. He could turn his head rapidly from side to

side and stoop to pick up things, but he could not look up at an object to his left above him, because in that position the head is lowered to the right. The urine was acid, normal in quantity and character; there was no free uric acid. There was no evidence of organic disease of the heart. This patient had a gouty mother, but had not himself suffered from declared gout. The exacting character of his professional work, however, rendered him predisposed to goutiness.

It seems a little curious perhaps that after dwelling upon vertigo accompanied by deafness or noises in the ear I should illustrate my remarks by quoting a case in which the hearing remained quite unaffected and there was no tinnitus. But the character of the vertigo in this instance so strongly points to its connexion with the semicircular canals that we do not need the other symptoms in order to refer it to disorder in the district of the auditory nerve—in that section of it, at least, which is distributed to the semicircular canals. The faintness may be considered as probably due to inhibition of the heart's action through the vagus nerve. In his first attack the vertigo, which, it will be agreed, was typically characteristic of that referred to the auditory nerve, was the most prominent symptom. In the second attack it was the heart's function, probably through the vagus, which was most powerfully affected. This was accompanied by profuse sweating and large discharge of colourless urine, symptoms which may fairly be referred to irritation of centres situated in the medulla oblongata. The legitimate inference appears to be that the nucleus of the vagus, the auditory nucleus, as well as the vaso-motor centre in the bulb, were all subject to some irritating influence, which somewhat varied in the point most severely affected on the two occasions.

It has been frequently suggested as an explanation of the coincident troubles in the region of other nerves observed in cases of Ménière's vertigo that these are brought about reflexly through irritation of the ultimate branches of the auditory nerve distributed to the semicircular canals. But in the case just related it seems much more probable, as I have said, that the irritation was applied to the central ends of the nerves in whose district disorder of function was observed.

It is necessary to consider whether it is likely that irritation exerted in this situation would produce such disturbance of function, and for this purpose we may refer to the evidence afforded by other analogous conditions. Several years ago, when the subject of Ménière's vertigo was under discussion at one of the medical societies,[1] I suggested, as a possible explanation of the symptoms, that something like the nerve storm of migraine swept the medulla oblongata, and set up in the auditory nerve a condition which would give rise to neuralgia in a nerve of common sensation. I thought that the vertigo might probably be the expression of such an influence applied to the auditory nerve centre as would occasion pain if applied to the central origin of a nerve of common sensibility. What we call neuralgia, when it does not depend upon inflammation or some coarse irritation of the nerve trunk, is probably due to some change affecting the central origin of the nerve. Sensory nerves are excitable in their entire course from centre to periphery, and pain is produced by irritation of any part, although, according to the law of peripheral perception, it is always referred to the periphery. Supposing the change to affect the sensory nucleus of the trigeminal nerve in the medulla oblongata, we should expect to get pain referred to that portion of the distribution of the nerve which is represented in the particular section of the nucleus exposed to the irritating influence. The influence, then, of whatever nature it be, whether applied to the fibres of the fifth nerve or to its nucleus in the bulb, in either case gives origin to pain in the district of distribution of the nerve. But a like irritating influence applied either to the fibres or the nucleus of the auditory nerve will not of course give rise to pain referred to its distribution—for the auditory nerve is a nerve of special sensation,—but to perturbed action in the organs supplied by the nerve, to tinnitus if the cochlear portion be subjected to the influence, and to giddiness if the part distributed to the semicircular canals be affected, and this whether the trunk of the nerve or its nuclear origin be the part attacked. This at least appears to me to be what must naturally be expected. It may be asked, granted the probability of irritation either of the trunk or of the nucleus of a nerve giving rise to a similar result, is there any kind of proof that it is so? I think there is.

It occurred to Professor Pierret of Lyons, in a necropsy of a case of tabes characterised by neuralgic pains in the district of the trigeminal nerve, to search for changes in the descending root of the fifth, which passes downwards to the lower part of the medulla oblongata. He found that there did exist around this inferior nucleus of the trigeminus a well-defined sclerosis, the form and connexions of which recalled exactly what is seen in the posterior columns of the spinal cord in cases of tabes. There is a case of tabes now in hospital in which bulbar symptoms are marked, and the patient suffers from violent pains in the district of both fifth nerves, due, there can be no doubt, to sclerosal irritation of the descending roots of the trigeminals.

In the year 1880, when bringing some cases of Charcot's joint disease before the Pathological Society, I offered the suggestion that the attacks of vomiting and pain in the stomach (gastric crises) occasionally observed in the course of tabes were probably caused by irritation of the roots of the vagus, and subsequently pointed out that a similar explanation would account for the occurrence of the so called laryngeal crises. In all cases of tabes in which "lightning" pains have occurred during life, sclerosis of the root-entrance zone of the posterior column of the cord has been found after death, and this lesion may reasonably be looked upon as the proximate cause of the pains which, in accordance with a well-known law, are referred to the periphery. The resemblance between the gastric crises and the lightning pains is marked in the apparent spontaneousness of their occurrence, and in the strange irregularity by which they are both characterised—now present in rapidly recurring paroxysms for hours or days, or even weeks and months together, and now entirely absent for varying periods of time. It appeared to me that if sclerosis, which, when it attacked nerves of common sensation produced pain, came to invade the neighbourhood of the nucleus of the vagus, it might be expected to give rise to symptoms like those of the gastric crises (pain in the stomach and vomiting), and I suggested this hypothesis. At the meeting of the International Medical Congress in London during the following year, Professor Pierret showed me sections of the medulla oblongata which he had recently made from a case of tabes with gastric crises. I was much interested in seeing that the structures in immediate relation with the nucleus of the vagus exhibited distinct sclerosis.

Since then, as far as I know, in every case of tabes with gastric or laryngeal crises of which a necropsy has been published (where the medulla oblongata has been examined), the presence of sclerosis in the neighbourhood of the vagal nuclei has been established. In a recent paper[2] Rosenthal says, "The anatomical basis for the cardialgia and hypersecretive vomiting may be found in demonstrable degenerations in the territory of the vagus centres." We may take it, indeed, I think, as determined that subsequent anatomical examination has justified the hypothesis brought forward by me ten years ago. It may also, I submit, be allowed that irritation of the nuclei of bulbar nerves will occasion symptoms indistinguishable from those which would be produced by irritation of the periphery of the nerve.

The most important evidence bearing upon this point is furnished by a case published by Dr. Sharkey,[3] in which the characteristic symptoms of Ménière's disease were due to the presence of an intracranial tumour lying against the pons Varolii, and involving the auditory nerve.

In the short space at my command on the present occasion I cannot detail examples illustrative of this subject, but will refer briefly to one or two.

A very hard-worked professional man, thirty-seven years old, began to suffer in September, 1888, from depression of spirits and tinnitus aurium, and went into the country to recruit. Whilst there he had an attack of vertigo, followed by vomiting and a feeling of great illness, from which after a few days he improved, but later on four occasions experienced a return of the symptoms at intervals of about a week. The attacks then left him, and when I saw the patient about six months afterwards there had been no further return. His hearing was then not quite satisfactory, and there was some tinnitus (noise of a fife) in the ears, especially the right one. During the attacks he had been (to use his own expression) nearly

[1] Clinical Society's Transactions, 1876, p. 101.

[2] Wien. Med. Press, 1887.

[3] Brain, April, 1888.

"stone deaf." I found that he could turn his head to either side without becoming giddy. This patient's father inherited and suffered severely from gout, and the patient himself three years previously had a slight attack of gout in the ball of one big toe, which lasted a week. He had been accustomed to eat a good deal of meat, to drink a fair amount of Australian wine, and to take but little exercise. Let me draw your attention to a point which appears important. During the attacks the patient said he had been nearly "stone deaf." It is clear that a deafness which is paroxysmal in this way cannot be dependent upon organic disease, and that we must look elsewhere than in the internal ear for an explanation of it.

A stout, well-nourished, temperate man, forty-six years of age, was taken with vertigo, relieved, it was thought, by brandy, but followed two hours later by a very violent return. This was coupled with vomiting, profuse sweating, and violent palpitation. There was deafness and tinnitus in the left ear. When he attempted to sit up or turn towards the left side he became intensely giddy and felt extremely ill, vomiting would occur, and without support he would fall. He did not see things moving; the giddiness was "in himself." It was only on changing his position that he became uncomfortable. The first attack occurred half an hour after a light meal. Immediately before the attack he had been feeling in particularly good health. His appetite and digestion were good, and there had been no evidence of any stomach disorder. The inability to move without giddiness and vomiting lasted for about a fortnight, since which time, now a year and three-quarters, he has had no return. He has no deafness and no singing in the ear. The patient's pulse shows high tension, and there is a family history of gout. There is no evidence of cardiac disease. There was a history of palpitation of the heart and occasional faintness for ten or twelve years previously to the giddiness, with transient glycosuria. He had also suffered for some months from paralysis of one external rectus muscle.

A lady fifty years of age, stout, flabby, with strongly marked uric-acid diathesis, suffers from vomiting and retching irrespective of food being taken. There is no alcoholic excess. She will dream that she is being sick, and wake with an illusive sensation of vomit in her mouth. Along with this there is vertigo only on change of position—highly suggestive of Ménière's vertigo; but nothing whatever can be found wrong with her ears. She has no tinnitus and her hearing is perfect.

Cases of the kind are very numerous. You must all, as I have, have met with them very frequently. They seem to me, whilst manifestly possessing the characters of Ménière's vertigo, to point, not to any pathological change in the internal ear, but to a transient influence exerted upon the auditory nerve nucleus in the bulb. In such cases you will find that sometimes one nerve centre and sometimes another appears to bear the brunt of the influence. Violent attacks of vertigo with auditory symptoms may occur at irregular intervals, the patient enjoying good health meanwhile, and being quite free from symptoms pointing to disorder of the ear. Perhaps a certain amount of tinnitus or deafness may remain, showing that the irritation of the centre has not entirely subsided. In other cases the patient may have an attack of irregularity of the heart's action, comparable in its suddenness and violence with the vertigo, which it apparently replaces. Or the sensory nucleus of the fifth may be attacked, and the patient suffer from neuralgia as paroxysmal in character, occurring and subsiding as suddenly as the vertigo with which he is seized on some other occasion. It appears to me that we can scarcely fail to see in the paroxysmal character of these various disorders, and their liability to occur in the same individual, evidence of a common causation affecting at different times various nerve centres in the bulb.

In case we are right in thinking that some irritative influence in the bulb is a very frequent determining agent in the production of giddiness and other troubles—vomiting, irregularity of the heart's action, neuralgia, glycosuria, faintness,—is it possible to say what is the nature of this influence? The time has not yet arrived when anything definite can be said on this point. There appears, however, some reason to think that it may be due to the presence in the blood of uric-acid salt or some equivalent. Cases of the kind described are very numerous, and so common is it to find some gouty history in them that I constantly shape my inquiries and treatment in this direction, often, though not by any means always, with success.

It is customary to refer the cardiac symptoms to reflex irritation from a disordered stomach, but, if you inquire carefully into these cases, I think you will find, as I have, that there is usually no evidence whatever of a local gastric trouble. The tongue is clean, the appetite good, and the process of digestion is attended with no discomfort. In these circumstances it seems much more likely that the influence is exerted directly upon cardiac nerve centres in the bulb. The presence in the blood of some substance prone to show what has been termed "elective affinity" for certain structures would best explain the phenomena, and this substance may possibly be urate of soda, the presence of which in the blood of the gouty has been demonstrated by Garrod.

Many years since I brought forward clinical evidence which appeared to show that uric-acid salts by their presence in lymph spaces might produce symptoms of sciatica and infantile paralysis.[4] I would only now suggest that a like source of irritation of nerve nuclei in the bulb is conceivable in connexion with the lymph spaces in the walls of the bloodvessels, but this is necessarily hypothetical.

It has long been my habit to prescribe salicylate of sodium in cases of vertigo associated with auditory nerve symptoms. The employment of this drug suggested itself partly on account of its influence in the elimination of uric acid, as pointed out some years ago by M. Germain Sée, and partly also because it apparently exerts some direct influence upon centres in the medulla oblongata, occasioning, as it does in full doses, reduction of temperature, headache, deafness, tinnitus aurium, giddiness, and sometimes dangerous depression of the heart's action. It is only, however, since I read the admirable papers of Dr. Alexander Haig on Uric Acid[5] that the advantage belonging to the employment of the salicylates has appeared to me to receive adequate explanation.

I have neither the time nor the ability to proceed further in a direction which would rapidly lead us into the question of the nature of gout, and its possible connexion with a nervous origin—a question which has been so ably discussed by Sir Dyce Duckworth. The object of this address has been to urge that we must often look to something in the bulb itself for the explanation of vertigo with auditory symptoms and allied disorders of function in the district of bulbar nerves. What that something is I cannot pretend to say. It may be uric acid salt, or possibly some other product of disturbed metabolism.

ABSTRACT OF THE

Lettsomian Lectures

ON

SELECTED SUBJECTS IN THE SURGERY OF INFANCY AND CHILDHOOD.

Delivered at the Medical Society of London,

BY EDMUND OWEN,

SENIOR SURGEON TO THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.

LECTURE II.

HARELIP.

BY way of preface the lecturer recalled the fact that at a very early period of development the nasal and oral cavities were directly continuous, and that their separation was eventually effected by the junction in the middle line of the horizontal ingrowths of the maxillary processes; that the most anterior and central part of the hard palate was developed on either side of the median line in the intermaxillary bone, and that this, containing the incisor teeth, was an offshoot from the fronto-nasal process, which comprised also the septum of the nose and the median part of the upper lip; and, lastly, that this median part of the lip

[4] The Practitioner, 1877. THE LANCET, 1880.

[5] Medico-Chirurgical Transactions, 1887. The Formation and Excretion of Uric Acid, 1888.

became in due course blended with the lateral parts of the lip, which were the integumental coverings of the maxillary processes before mentioned. Thus, it was easy to understand how arrest of development might give rise to a sagittal cleft of the soft and of the hinder part of the hard palate, or to one which, continuing forwards, inclined outwards on one side, or on both sides of the intermaxillary bones.

The bilateral palatine fissure was very apt to be associated with double harelip, in which case the intermaxillary bone might fail to arrive at its proper position, and together with its prolabial covering might even be content to occupy an isolated and conspicuous attachment at the tip of the nose. As is shown in these remarks, the fissure of the imperfectly developed lip must be at some distance from

FIG. 1.

Double harelip; premaxilla attached to tip of nose.
(From a photograph.)

the middle line—namely, at the site at which the median process should blend with the lateral fold; still, in certain instances, the gap is found exactly in the middle of the lip.

Such a case was shown by Mr. Bernard Pitts at one of the meetings of the Medical Society last March. The cleft did not extend into the nostril; indeed, such an error would have been developmentally impossible, but it reached half-way from the free border of the lip to the septum of the nose. In considering the embryology of the lip, it strikes one as strange that median harelip should be of such remarkable rarity, for though the central part of the lip is developed from the descending fronto-nasal process, that lappet, as shown both by Ecker and His, is bifid; and if the interval between the two lateral tubercles should

FIG. 2.

Intermaxillary bone and prolabium attached to lip of nose.
(From a photograph.)

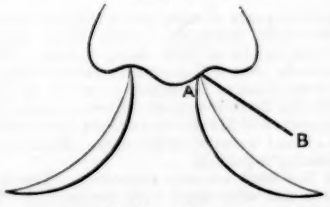
fail to be effaced, the median cleft is at once established. Some day a child would probably be exhibited who had lateral harelip associated with a median cleft, and Mr. Owen would greatly like to see it. "Inasmuch as the operation which I am in the habit of employing in cases of harelip differs considerably from the accounts of the operation found in our text-books, I propose taking this opportunity to describe it somewhat in detail. But before doing so I would remark that the surgeon must carefully assure himself that the child is in a fairly satisfactory state of health when considering the advisability of operating, or else his handiwork will not improbably fail."

The first question which the surgeon asks himself in a deformity of this sort is, "Can the intermaxillary bones be used for filling the front of the palatine cleft after the superfluous bone has been removed from the nasal septum?" Of course, if the piece of bone can be so used, the subsequent operation upon the palatine fissure will thereby be much simplified. There are, however, two fallacies in connexion with the thrusting back of the intermaxillary bone; unless it be pushed well home, it may exert a pressure against the line of operation in the new lip, and so obstruct prompt and complete union. Secondly, when thrust into the cleft, it may fail to take up a secure attachment, and may prevent that narrowing of the palatine fissure which a successful operation on the lip may be expected gradually to effect.

In the case of which the photographs were shown (Figs. 1 and 2), it was impossible to gain advantage by preserving the intermaxillary bones, so the osseous tuft was removed and a considerable amount of the advanced nasal septum; the sides of the prolabium were then trimmed off, so that the median strip might be laid down the front of the septum to form an integumental column between the nostrils. The next step consisted in freeing the maxillary portions of the lip from the subjacent bone; and unless this be very thoroughly done, it is impossible to get the vivified edges approximated across a wide gap, without the presence of enough such tension upon the sutures as to spoil the chance of primary union. When the labial flaps have been thus freely detached, the incisions are planned for obtaining the raw edges. By the old and usual method of proceeding, this was effected by dissecting away the mucous membrane from each side of the gap. There are two objections to this plan: in the first place, it is needlessly wasteful of valuable tissue; and, secondly, when the raw surfaces are drawn together, a triangular notch permanently marks the spot where the vertical scar runs somewhat conspicuously on to the free border of the lip.

By the method of operating which Mr. Owen recommended, the mucous membrane is economically yet sufficiently peeled from one side of the cleft and from along a

FIG. 3.



good deal of the free border of the same side of the lip; whilst from the other side a very bold flap is cut which is tapered off to the top of the cleft, and is then brought across and laid along the denuded border of the lip upon the other side. Thus its thickest part forms a prolabium, whilst that which was previously the red, mucous border of the vertical cleft, becomes the free, horizontal border at the bottom of the obliterated fissure as well as of the opposite side of the lip.

"I would particularly insist on this, that the piece which should be brought across is not a mere paring of one border of the cleft, but a thick, wedge-shaped flap which is boldly tilted down, so as to leave a firm gap into which the opposite side of the lip, which has been already denuded in its vertical and horizontal borders, may be conveniently dovetailed. Such a flap is far more likely to take union than is a thin paring, and in addition it should form a good prolabium. A great advantage of this, as, indeed, of any other flap operation for harelip, is that the resulting and necessary scar does not traverse the mucous membrane in the line of the scar in the skin; but, being deflected outwards, may escape attention as it gradually tails off to the free border, which it may reach at a slight distance from the corner of the mouth." In the case under consideration, the left side of the lip was deemed the more suitable for supplying the prolabial flap, the incision was, therefore, made downwards and outwards in its substance, beginning right up in the nostril, as shown in Fig. 3, A, B. The right side of the lip, having had its mucous membrane carefully pared off, the lateral halves of the lip were then brought forwards to the middle line; this could not have been done, however, unless their connexions with the superior maxillæ had been thoroughly torn through, as already described. When the right half of the lip had been thus brought to the middle line, the incision, A, B, which had been made obliquely into the lip,

forthwith became vertical, the thick flap, which had previously been vertical, becoming horizontal, and ready for adjustment, so as to form the prolabium, and also the mucous border of the restored lip. The right side of the lip being drawn inwards, some of its freshened border, C D, lay vertically in the middle line, whilst the rest of it, D E, formed a horizontal edge to which the deflected flap from the left half of the lip was then adjusted, the middle part being so arranged as to fit into the retiring angle on the left side, as at B. As a rule, the flap is long enough to reach quite up to the labial commissure of the side to which it is reflected, so that it saves time if the operator thinly peels off the mucous surface in the short horizontal part of the lip as well as in the vertical part. The pink membrane must be cleanly and entirely removed, for if any of it be left, primary union at that spot is impossible. It should be removed from before backwards from around the entire thickness of the lip, so that the approximated raw surfaces

FIG. 4.

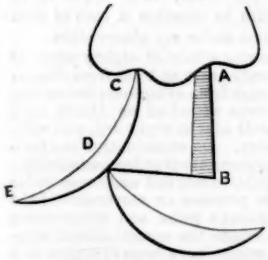
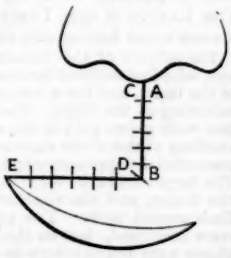


FIG. 5.



may be thick and serviceable. Not a particle of skin, however, should be sacrificed. (See Figs. 4 and 5.)

The raw tip of the new columna nasi was then implanted at the upper end of the interval between the approximated labial folds, and there fixed by sutures of fine wire; the same material was also used for the stitches by which the lateral flaps were adjusted. These stitches were liberally applied, not only down the front of the lip, but also on the dental aspect, so as to prevent the child putting its tongue into the wound, and also to protect the raw edges from the irritation which would be likely to be set up by the intrusion of food. In a case in which this posterior set of stitches was omitted, the uniting medium between the halves of the lip was only of the thickness of the skin. "Though I had been brought up in the belief that steel pins were not only convenient, but actually essential for the successful treatment of harelip if the defect were considerable, I have now for several years given them up absolutely and entirely, even in operations upon the very worst cases, and I find that I get on much better without them. Not infrequently the spots at which they had traversed the skin were permanently marked by conspicuous dots of scar tissue. The rows of sutures at the front and back of the lip render the use of the pins quite superfluous."

When the operation was completed the new lip was of necessity comparatively small, and the lower lip looked extremely prominent; these conditions are inseparable from the operation upon a wide cleft. To remedy the unsightly want of proportion between the two lips, the only expedient was the levelling down of the prominent lower lip, and this was effected by the removal of a large wedge-shaped piece from the middle of it, the raw surfaces being carefully adjusted by sutures upon both the dermal and the mucous aspects. The effect of this proved highly satisfactory. When a wide oro-nasal fissure, such as this was, is partially closed by operation, the child's breathing is necessarily embarrassed for a short time afterwards, for whereas the airway had been unusually spacious, the child is subsequently obliged to breathe through the nose and mouth. In this particular case a nurse had constantly to guard the child from suffocation, by gently separating the lips and depressing the tongue until he had accustomed himself to the normal airway. In another similar case where this serious difficulty had arisen, it was successfully overcome by temporarily introducing a stiff piece of drainage-tube into each nostril. There are few surgical disappointments more keen than that which one experiences when, after a carefully planned and successfully accomplished plastic operation, the very first inspection reveals that everything is going wrong—that the flaps are failing to unite, and that every suture is freeing itself in a quiet ulceration.

> "The best laid schemes o' mice and men
> Gang aft a-gley,
> And lea'e us nought but grief and pain,
> For promised joy."

But when after a harelip operation the surgeon finds that all has broken down, and that there is no chance of obtaining the smallest amount of primary union, he should still hope for a good result by granulation, and this he will be very likely to obtain by carefully adjusting and securing the loose flaps of the lip with pieces of strapping.

ON A SUBJECTIVE SENSATION OF THE MOUTH IN WOMEN.

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WITHIN the last twelve months four cases of this distressing and obstinate affection have come under my observation. I know of no references in medical literature to this subject, though possibly some exist. Hence I have ventured to give the cases in some detail in order to show that the main features of this affection are practically identical in each case. All the patients were women of adult or advanced life. The onset is stated to have occurred at the ages of thirty-nine, fifty-two, sixty-three, and seventy-four. In every case the sensation was described as being an intolerable burning of the tongue, extending sometimes to the lips and roof of the mouth. In the two cases last recorded, the sensation was especially severe at night, and also at any time of the day when the patient lay down. One of the patients had a small epulis of the upper jaw, and another enlarged papillæ on the tongue. These local conditions in all probability had no essential share in causation, although it is possible they had some influence in intensifying, and perhaps in predisposing to, the subjective sensation. Disregarding one patient, the woman with an epulis, whom I saw only once, the other patients were nervous, excitable individuals, who flushed readily. In the case last described in this paper, the influence of shock in intensifying the local feeling is well exemplified. This affection no doubt is "functional," and forms a well-defined group in that large class of subjective sensations in women. The distress and misery which this condition entails, and the serious way in which sleep is interfered with, are well illustrated in the following cases.

The first patient who came under my notice was a lady aged seventy-four. For the opportunity of seeing her I am indebted to Dr. McFie Campbell of Liverpool. She was suffering from aortic regurgitation, with irregularity of the heart and dyspnœa. From the history it would appear that the cardiac trouble had been in existence some years. She was quite aware that she was the subject of serious heart disease, but she looked upon this as trivial compared with the misery entailed by the local condition in the mouth. For six months she had had an almost constant burning and scalding sensation about the tip of the tongue and lips, which made her life wellnigh intolerable, and which seriously interfered with sleep. There was nothing objective in the mouth. She suffered somewhat from flatulence and constipation, but this did not appear to be related in any way to the local state. She was very nervous, easily excited and frequently flushed with little or no obvious cause. At first I was inclined to think that the sensation in the mouth might be due to some vascular change caused by the valvular incompetency; but in the light of the cases which I saw subsequently I feel considerable hesitation in invoking this explanation. The local sensation was slightly relieved by the use of cocaine tablets containing one-sixth of a grain, and later one-third. For a week I tried tincture of belladonna in doses of ten minims three times daily, though without effect. The patient died a few months after I first saw her, the local condition persisting with little change until the end.

In the early part of last year two other cases of this kind

came under my observation. The first, to which I have already alluded, was that of a married woman of thirty-nine, who had a small epulis. The local feeling in the mouth was such as has been described. Unfortunately I have only a very brief note of the case, and I was unable to see her again after the first visit. The other patient was a married woman of seventy-five, whom I still see from time to time. There was no history of nervous disease or of "nervousness" in her relatives. She had always been a healthy woman, and had suffered from none of the symptoms incidental to women at the cessation of the catamenia, which occurred in her case at forty-nine. She had seen better days, and clearly felt the change for the worse in her social life. Her face reddened easily, and she was emotional and nervous. Her account was that twelve years ago she began to suffer from a burning sensation of the tongue, referred to the middle of the dorsum. Since that time the feeling has never left her even for an hour, has slowly grown worse, and has extended during the last five years to the gums and roof of the mouth. Six years ago she had excellent teeth; but when the gums began to burn, the teeth became blackened and decayed. About this time she was seen at St. Thomas's Hospital by my colleague Mr. Pitts, who tells me that he cauterised some enlarged papillæ on the dorsum of the tongue near the tip. I examined the mouth, and found the tongue was moist, clean, somewhat fissured, and with prominent papillæ. When touched with the finger she said that the sensation was "like burning." There were some minute papilla-like outgrowths on the gums, and the same sensation of burning was felt when the gums were touched. I took the temperature of the mouth on several occasions, but it was always normal. There were many old fangs, and the few teeth that were left were carious at the roots. She could detect sugar and salt, but mutton, beef, and other kinds of meat tasted bitter. A few days previously to her visit she had some cod, but could not tell what it was. She said it tasted like boiled bread. She complained also of a constant bitter taste in the mouth. The quantity of saliva was thought to have increased of late. The sensation of heat in the mouth was always worse at night, and so severe was it that the patient declared that she never slept. About this she was very emphatic, and when pressed hard would only admit that she occasionally "fell into a stupor." Constantly during the night she had to sip milk-and-water to relieve the discomfort. Sometimes she tried to sleep in the afternoon, but without success; the burning became intolerable as soon as she lay down. It was very clear from her statements that the local condition had made her life a burden, and had interfered to a serious extent with sleep. For the preceding six or eight months she had been unable to take solids, because of the burning pain which was excited. Accordingly during this time she had been obliged to live upon fluids. For many years she had suffered from nettlerash, with great itching, chiefly occurring at night. For six months I tried many remedies, likely and unlikely. Among the drugs employed were jaborandi, bromide and iodide of potassium, belladonna, chlorate of potash, antipyrin, and the local application of glycerine of borax and boro-glyceride. No benefit was derived from any form of treatment.

The last patient was a florid, excitable, married woman of fifty-three. There was no history of neurosis in the family. The catamenia ceased at the age of forty-five, and shortly afterwards she began to suffer from flushing of the face, which still persists. About a year ago the tip of the tongue began to tingle. About a couple of months later she received a shock from seeing a brother, just come from abroad, who was suffering from a cancerous affection of the face. The slight tingling of which she had previously complained was at once replaced by a burning sensation of the tongue, which soon extended to the entire mouth. At first the burning was almost confined to night, and was especially noticed when the patient retired to bed. Now the feeling of heat is constant, but becomes worse at times. The sensation is somewhat relieved by eating food and by sipping water and cooling drinks. She complained that she slept badly, and, like the patient last described, she said that her sleep was more like falling into a stupor. She could detect sugar and salt, but meat tasted very insipid. There had been no noticeable alteration in the quantity of saliva. The mouth presented a normal appearance, and sensation was natural. The feeling of heat was not induced by touching any part of the fauces or tongue. All the teeth had been removed with the view of alleviating the local distress. The patient was only under my treatment for two or three weeks, and several remedies which I tried failed to give relief. I expect to see the lady again when she comes to London, and then I propose to try the effect of a mild continuous current. Dr. Poole Berry of Grantham, under whose care the patient now is, kindly took the temperature of the mouth and axilla night and morning for a week. No rise of temperature was noted.

Welbeck-street, W.

A CASE OF GANGRENE OF THE LEG PRECEDED BY PHLEGMASIA DOLENS.

BY WILLIAM O'NEILL, M.D., M.R.C.P. LOND., &c.

ALTHOUGH a lengthy and elaborate disquisition on gangrene of a special form, and also interesting descriptions of gangrene involving the lungs, have appeared in THE LANCET of late, I venture to mention a case of that disease which has recently come under my observation.

The subject of the disease was a lady of eighty years of age, who had suffered for twenty years at least from disease of the heart, and for a few years from symptoms indicating softening of the brain. She was attacked on March 18th last with great pain in the calf of the right leg, and with swelling of the whole extremity. On examination the limb presented the appearance and symptoms of phlegmasia dolens. The large vein in the thigh could be felt full and tense under the finger, and the slightest pressure or movement of the limb caused pain. The patient's pulse and temperature were increased, but on the whole the constitutional symptoms were not so severe as might have been expected in a person so frail and advanced in years. The lady was induced to keep the horizontal position, and warm fomentations were assiduously applied to the affected limb; and in the way of medicine she took first a diuretic mixture with ammonia and iodide of potassium, and afterwards a tonic mixture. Added to this, the nursing was good, and the nourishments to select from were numerous and abundant and all that could have been desired. In three weeks the swelling had nearly disappeared, and in about a month the patient felt comparatively well and was able to sit up for an hour or two at a time. Indeed, her relatives considered her to have been in as good health as she was before the illness. Soon after this, however, she was again seized one night with violent pain and indescribable sensations in her leg and foot, and she became so prostrated that her attendants said that were it not for a liberal administration of brandy she must have died. She was also described as having been delirious and as having passed unconsciously some extremely fetid motions. The next morning when I saw her she had somewhat rallied from the state of exhaustion in which she had been the previous night. I noticed that she had very much changed in appearance since I had last seen her. In health her face had been fair, round, and full, but now her features were pinched and shrunken, and the colour of the skin of the face, as well as that of the whole body, was a peculiar brown, not at all unlike the colour of coffee-grounds vomit. The pulse was rapid and irregular, and the bowels were still relaxed and the motions offensive. When left to herself she talked in a rambling manner, but when roused and spoken to she answered correctly. Asked about pain, she said that her foot felt dead, and that she only felt a little pain in the leg when the nurse raised it from the bed. On exposing the leg to view, it presented a most striking appearance from just below the knee downwards. It looked as if a blue silk stocking with three or four holes in it had been drawn up on the leg and had tightly compressed it. To continue the simile of the stocking, I may add that on the instep of the stocking there was a large hole, through which dark-red œdematous skin protruded. On the front and upper part of the stocking there were a few smaller holes, but the protruding skin was neither so red nor so swollen as that on the instep. The blue colour was darker on the toes and sole of the foot than any other part of the diseased surface. The leg felt very cold, and no pulsation could be found in it. The patient was ordered bark and carbonate of ammonia, and great efforts were made to warm the leg and to keep it warm. For two or three days the exhaustion of the patient

was extreme, and the blue discolouration became darker. Then the blue tints became lighter and the red patches paler and less swollen, and the patient herself gradually improved. She took food and stimulants well, but in extenuation of this she remarked to me that she took them as a duty, not that she desired them much. For a week or more the progressive improvement in the patient's condition was so marked that her relatives began to buoy themselves up with the hope that she would recover from this disease as well as she did from the other, and her constitution was highly praised by some in consequence of being the cause of her improvement. Unfortunately the hopes of the hopeful were doomed soon to be blighted, for, on the twelfth day from the onset of the disease, diarrhœa, delirium, and collapse again set in, and the poor lady rapidly sank. After death it was discovered that the blue colour had extended up the thigh behind, nearly as far as the buttock, but not so high in front.

The point of greatest interest in this case lies, I think, in the gangrene. I have not seen before so large a portion of a limb destroyed by that disease as was the case in this patient. No doubt her bloodvessels, like her heart, were more or less diseased, thus favouring the formation of thrombi and emboli. The first attack which the limb sustained was doubtless caused by an obstruction in the femoral vein at or near Poupart's ligament, and the second by an obstruction in the popliteal or lower part of the femoral artery; and when the general and local symptoms and the results of the venous obstruction and the arterial obstruction were respectively contrasted, hardly any two diseases could have been more dissimilar. The obstruction to the venous blood in its course to the heart and lungs, or in its return journey, caused the extremity to swell in all directions; nevertheless, the limb made a good and speedy recovery. Of course, if the venous obstruction had been perfect, death of the limb would have been the result; but complete obstruction is not often the case, as there are generally some open and not affected veins that help to carry on a makeshift circulation till nature has time to rectify the disabled part. I think, however, that the generally favourable results in cases of this kind are in a great measure owing to the subordinate purpose which the venous blood serves in the body—that of conveying from the tissues effete matters to places where they can be discharged or ejected; and experience teaches that the principal vein in a limb can, without much danger to life, be greatly obstructed and its functions interrupted long enough to allow a collateral circulation to be established and the obstructing plug to be absorbed. But an obstruction in a large artery, unless there is provision for the immediate establishment of a compensating collateral circulation, is a very serious matter, as the case of this old lady shows, for the plugging of an artery deprives the portion of limb in front of the obstruction of its vital fluid, and, the vital fluid being cut off, the supplies are cut off, and, the supplies being cut off, collapse, starvation, and death of the tissues rapidly follow. I am not sure, however, that this patient's leg was entirely deprived of its arterial blood-supply, because the red and blue became lighter as the lady improved. In the first instance, the red and swollen patches on the instep and front of the leg may have been caused by regurgitation from the capillaries and veins, and afterwards the vitality of these patches may have been maintained by some small arterial vessel or vessels. The colour of the skin of the diseased leg impressed me much, and strongly reminded me of a case of hydrocyanic acid poisoning I once saw, in which the colour of the skin of the whole body was a beautiful purple; but in this lady the skin of the leg was a fine *bleu de roi*, whilst that on the toes and sole of the foot was a *gros bleu*, inclining in some places to a black. The fatal seizure may have been the result of the escape of septic fluid from the diseased part into the general circulation, or more probably it was caused by a new thrombus having been formed high up in the femoral artery, thus cutting off a larger portion of the limb from the circulation, and so giving rise to a further extension of the blue colour.

Lincoln.

THE ROYAL VACCINATION COMMISSION. — On Wednesday Lord Herschell presided at the first sitting of the Commission since the Christmas adjournment. Dr. Creighton's evidence, which was not completed at the last sitting, occupied the whole day.

THE EFFECT OF SECTION OF THE PHRENIC NERVES.[1]

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AND

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(*Concluded from p. 135.*)

EXPERIMENTS TO SHOW THE EFFECT OF PHRENIC SECTION IN NORMAL ANIMALS, AND THE VALUE OF ABDOMINAL SUPPORT IN SUCH CASES.

Experiment 1.—Rabbit, buck, weight 1½ kilogrammes, full grown.—4.30 P.M.: The phrenic nerves have had a ligature passed around them; anæsthesia by the minimum quantity of ether. In order that the animal may be as nearly as possible in its normal state when the phrenic nerves are severed, twenty-four hours will be allowed to elapse before these nerves are touched.—Next day (5 45 P.M.): Phrenic nerves divided. There is no struggling for breath, and the respiration is not greatly altered, except in so far as the movements of the diaphragm and abdominal walls are concerned. The animal remains very quiet, and, if undisturbed, fails to exhibit marked evidence of dyspnœa. It is to be noted that the number of respiratory movements with abdominal support made by the application of the hands to the animal's sides and the under surface of the abdomen is 72 per minute; but without support 78 per minute. The changes are so slight in this animal that we are inclined to believe that sufficient irritation of the phrenics has been produced during the twenty-four hours succeeding the operation to have caused the rabbit to breathe more with its chest, and so to have at least partially prepared itself for its new respiratory action. That this is more than mere supposition is proved by the position of the ligatures when taken away, for they are found to be matted together on each side, and shrunk by the juices of the parts.—Eighteenth day: Animal alive and well. The excursion of the ribs at the level of the sixth rib is 9 centimetres; at the level of the floating ribs it is 3 centimetres; midway between the abdomen and the ribs it is 2 centimetres. The increased costal movement is therefore very marked.

Experiment 2.—Rabbit, grey buck, weight 2 kilogrammes.—3 P.M.: Nerves taken up on ligatures.—5.50 P.M.: Both nerves severed. As no ether was administered, it was thought unnecessary to allow a greater lapse of time before the completion of the operation; there is no evidence of dyspnœa. The respiration is not stormy, and the general appearance is not one indicating systemic disturbance. The diaphragm can be seen to descend very markedly on expiration, and to ascend on inspiration. — 6 P.M.: The animal has remained stationary since the last observation, apparently from a fear that the dyspnœa, which is not pressing while it is quiet, may increase on exertion. It is evident that there is really no lack of air in the lungs.—6.5 P.M.: Pressure on the abdomen slows the respiration and gives the animal entire relief, so that, forgetting its dyspnœa, it attempts to move about. The respiration is only 60 per minute when compression is used, but 90 per minute when no pressure is applied.—6 30 P.M.: The respiration is now 120 per minute, owing to a rapid run around the room when no pressure is applied, but pressure relieves the dyspnœa, and the respiration immediately drops to 84 per minute. — Nineteenth day: Alive and well. — Fifty-sixth day: Alive and well.—Sixty-fourth day: Killed. The diaphragm was found to be very much degenerated, being a mere transparent tissue-paper like membrane, while the thoracic capacity was remarkably increased. The pectoral and intercostal muscles were much hypertrophied.

Experiment 3.—Rabbit, doe, weight 2 kilogrammes, full grown.—2.10 P.M.: No anæsthetic used. Phrenics have had ligatures around them for twenty-four hours. She has to-day a breathing closely resembling that seen in the rabbit whose phrenic nerves have been already cut, and there is probably

[1] Part of a paper to which was awarded the Warren Triennial Prize, 1889.

irritation of the nerves produced by the ligatures. The respiration at this time (before section), without support, is 70 per minute, with support 60 per minute. When the animal is placed on its back between the knees of the experimenter, there is evident dyspnœa, and the respiration rises to 95.—2.30 P.M.: Phrenics are cut. The respiration is now 108 without support, and only 78 per minute with support.—2.40 P.M.: Respiration is now 94 without support, and 66 per minute with support. The animal has been very quiet since the last observation, which probably accounts for the less rapid breathing.—2.48 P.M.: Respiration without support is now 108 per minute owing to a run, with support 78 per minute.—Eighth day: Alive and well.—Sixtieth day: Alive and well.—Sixty-first day: Killed. The phrenic nerves on both sides were found to be cleanly and completely divided. The chest capacity is enormously increased. The thorax was most unlike that usually found in rabbits. In shape and muscular development it was strikingly similar to that of the dog. The diaphragm was practically converted into a fibrous membrane. The muscular portion was thin and atrophied, was easily torn by the nail, and when held to the light exhibited to the unaided eye many patches of complete degeneration.

Experiment 4.—Rabbit, weight 1 kilogramme, three months old. No anæsthetic used.—2 P.M.: Ligatures have no sooner been placed around the phrenics than evidences of dyspnœa present themselves; so it would appear that those nerves have been irritated or injured. The animal throws itself on its abdomen, on the table where it had been set free, as soon as possible.—2.40 P.M.: Phrenic section has been made without waiting for several hours to elapse. The dyspnœa is now very marked, and there is slight humping up of the back with each respiration. The fore feet are braced, as if for support. Respiration without support is 48 per minute, with support only 30 per minute. Support gives marked relief to the dyspnœa if applied properly. These counts of the respiration were made so frequently that there can be no doubt of their accuracy, nor of the value of the abdominal support in producing relief; thus when the support was given by means of a binder, on its removal dyspnœa increased instantly, and death occurred from asphyxia twenty-five minutes after the section of the phrenics.

Experiment 5.—Rabbit, weight 1 kilogramme, three months old.—2.30 P.M.: The phrenic nerves have just been taken up on ligatures and the wound closed.—4.4 P.M.: The respiration is at this time 60 per minute.—4.5 P.M.: The phrenics are now divided by jerking the ligatures.—4.6 P.M.: Respiration is now 96 per minute without support to the abdomen, but 60 with support applied by the hands. Binder was applied and allowed to remain.—4.36 P.M.: The respiration is still at 60 per minute.—4.45 P.M.: Dyspnœa is evidently increasing.—4.50 P.M.: Death from asphyxia.

Remarks.—It is evident that in these young rabbits death was due to exhaustion of the thoracic muscles, and that as long as these functionally remain intact life was preserved. It is also evident that support does good in every case where it is applied. We have already spoken of the violent struggles which ensue when the phrenic nerves are divided, and it has been thought by Marckwald and others that the sensory fibres discovered by Budge and Panizza were the transmitters of a sufficient degree of pain to make it probable that this was the cause of the struggling movements. In our opinion, however, this is in part a mistaken idea, since we have found that rapid section of these nerves in older rabbits, when in a normal posture, is not followed by these struggles; and this observation has also been found to be correct in respect to the dog and goat. As the nerves are severed in both instances, the cause of the struggles must be the asphyxia which ensues when the animal is tied down on its back. The presence of sensory fibres, however, has been brought to our notice by the fact that violent struggles may take place when these nerves are picked up and irritated. This was especially marked in the horse. As we have established the fact that section of both phrenics proves, if the animal is tied on its back, fatal, it has seemed to us not only interesting, but of value practically to determine the effect of section of one phrenic at a time, and the result is to be seen in Experiments 6, 7, 8, and 9. In Experiment 6 the animal was full grown, but in Experiment 7 it was young and poorly developed. In the first, death did not follow; in the second, death did ensue. In Experiment 8 the rabbit was also a young one, and death again took place. Experiment 9 explains itself. The thought occurred that the exposure of the nerve and the necessary irritation of it might sufficiently interfere with its function to be a cause of death. The result was interesting, for the rabbit lived and suffered no inconvenience. It may therefore be considered proved that while single phrenic section is not fatal in old rabbits, in young ones it often is so, but that the danger is much less if the nerve on one side is left absolutely untouched by the operator.

Experiment 6.—Rabbit, weight two kilogrammes, full grown. This experiment was to determine the effect of section of one phrenic nerve, and also whether a full-grown rabbit, if tied down after double phrenic section, would live. Left phrenic nerve was cut one week ago.—3.30 P.M.: Right phrenic nerve cut, death immediately came on. As one of the nerves had already been cut for so long there was a better chance for survival than if both had been cut at once, proving therefore, that dorsal decubitus causes death.

Experiment 7. (To determine effect of section of one phrenic nerve.)—Rabbit, weight 1½ kilogrammes, not full grown. The animal is not strong and is poorly developed.—12 noon: Both phrenic nerves have been prepared for section.—12.25 P.M.—The left phrenic nerve has just been cut. There is marked evidence of dyspnœa. The head is held high in the air and the neck is extended.—Next day: Rabbit found dead in the cage this morning. There is tubercle of the liver, but not sufficient to cause death. There is venous engorgement of the right side of the heart, and the lungs are congested.

Although the last experiment virtually proves that section of one phrenic is followed in the strong rabbit by survival, for that animal lived for a week after the first section, this one was done for the purpose of determining the facts of the case positively.

Experiment 8.—Rabbit, weight 1 kilogramme, quite young.—3 P.M.: Both phrenic nerves prepared for section.—5 P.M.: Left phrenic nerve cut.—Next day: Found dead in cage from asphyxia. There is venous engorgement of the great vessels and the right side of the heart.

Experiment 9. (To determine whether the irritation of the uncut nerve by its being bared aided in causing death.)—Rabbit, weight 1½ kilogrammes, age three months.—2 P.M.: Right phrenic nerve prepared. Section of right phrenic nerve. The left nerve is entirely untouched.—Second day: Still alive and eats well. It is worthy of note that in this animal the nerve was not even discovered, whereas in the other instances the nerve on one side was irritated by a ligature, although it was not cut. The left nerve in this case escaped entirely any traumatism in the operation.—Third day: Still as well as ever.—Twelfth day: Has been progressively wasting for several days and was found dead in the cage this morning from tuberculosis, as was proved by the necropsy. The post-mortem examination showed marked wasting of the diaphragm on the right side and hypertrophy of the opposite or left side.

Conclusions.—1. Injury or destruction of the phrenic nerves is not followed by death, as has heretofore been taught. 2. In injuries involving the diaphragmatic movements it is important that the patient shall not be anæsthetised, as under those circumstance the absence of voluntary aid in respiration may be attended by fatal results. 3. The seriousness of phrenic injury is in direct ratio to the dependence of the respiration of the normal animal on the diaphragm and to the ability of the chest walls to make compensatory movement. 4. The symptoms resulting from interference with the function of the phrenic nerves are as definite and characteristic as those following interference with any other motor nerve. There will always be well marked increase in the scope of the thoracic excursions and distinct reversal of the movements of the abdomen—i.e., the abdomen will retract on inspiration. 5. Fear of injury to one or both phrenic nerves need not prevent operations about the neck and upper portion of the chest, provided that due caution be exercised that the patient is but slightly under the influence of the anæsthetic at the time that danger of injury to these nerves is most imminent. Infancy, however, constitutes an exception to this rule; only absolute and pressing necessity for operation would afford justification for such a procedure in early life. 6. The real effects of section of the phrenic nerves being known, it follows that the nerve is subject to the same operation in case of injury as are other nerves of the body, such as suture. 7. In cases of injury to the phrenic nerves support should be given to the abdominal walls, to prevent movement of the same and to brace and steady the paralysed diaphragm, care being taken that the floating ribs are free.

NOTES ON EPIDEMIC INFLUENZA.

BY SEYMOUR TAYLOR, M.D., M.R.C.P.,
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THE epidemic now so widely prevailing in London and the provinces demands serious attention. It is probable that practitioners will overlook or not recognise the earlier cases which come under their observation; and, further, the public, from an erroneous impression of the disease gathered from accounts in the lay press, are apt to regard influenza as a disease presenting symptoms mainly of catarrh of the eyes and nose, together with aching over the frontal sinuses; and think that such are the main, if not only, symptoms. But, whilst admitting that some cases of true epidemic influenza do present such popular symptoms, it is as well perhaps that some clinical sketch of the disease should be written from direct observation of the numerous cases now presenting themselves at the hospitals and in private practice. I have therefore been induced to describe somewhat imperfectly an attack; the following account being a digest of the principal conditions which I have noted in not a few cases under my care and observation.

The incubative fever is probably of short duration. I have not been able to fix it, as it is difficult to ascertain the exact date of exposure. Still, if I may judge from the large number of cases I have seen, the incubative fever is of short duration, probably not exceeding three days.

As regards predisposing causes, no age appears to be exempt; and although it attacks children as well as adults, it is probable that many cases in early life are overlooked owing to symptoms in children being masked by other conditions giving rise to febrility, and also to the fact that children cannot draw attention to their more pronounced signs. Adults, therefore, appear to present the greater number of cases; and, further, it is probable that grown-up people are the first to be attacked, the juvenile members of a community or family only becoming victims at a later period. Overwork and anxiety are certainly important predisposing causes, the majority of cases coming under our care both in hospital and private practice being the heads of families or the bread-winners and those subject to heavy or harassing occupations. The attack is remarkably sudden. Although many cases present themselves with a history of a previous "cold" existing some days before "influenza" symptoms supervene, still a very large percentage of victims come to us with a history of a clean bill of health up to the day of a sudden seizure. The history most often is one of an abrupt illness, coming on during the later part of the day, and characterised by great lassitude and a sensation of tired feeling in limbs. There is some, and often marked, pallor; there are rigors, thirst, and general malaise, with constipation. These symptoms last from twelve to twenty-four hours, and constitute the first stage. On the succeeding day there supervene severe and general pains. There is headache, often occipital, but most frequently frontal; aching and tenderness of eyeballs are most marked pronounced complaints, and beyond these pains are often complained of in the loins, extending round to the sides and front of the abdomen, up the vertebral column and the muscles of the spine, and also especially in the thighs and legs. Shoulder muscles, too, are also not infrequently involved, whilst the joints themselves often appear to escape. I have also observed patients complain of distress in the muscles of mastication, and at times also of muscular pains during defecation and micturition. Vomiting may or may not be present. In addition, during this second stage the face becomes a dusky red tint, the eyes have a heavy look, and the conjunctivæ have a tendency to become suffused and injected or "ferrety," the patient having a heavy expression, not unlike that of mild typhus. Mental depression is often a marked feature. The skin, which was dry and pungent in the first stage, now begins to act freely. The temperature rises abruptly with the onset of the fever, and probably reaches its maximum on the second, or it may be the third day. An observation of 102·6° is a not infrequent one, but the thermometer may register as high as 104°, and even in children 105°. The temperature falls on the third or fourth day to 100°, or thereabouts, and about the fifth day it reaches the normal level, unless there be, as is often the case, some complication (pulmonary usually) which keeps the temperature up. But the patient is by no means yet out of danger. The catarrhal affection of the respiratory tract, which one usually associates with the disease, now attracts our attention. A general subacute bronchitis is now as a rule evident on auscultation, and it lasts a variable time, from a few days to a week or longer. In addition, sneezing, running from the eyes and nose are not infrequent, and I have in several cases observed epistaxis. The general muscular weakness, so pronounced a symptom from the onset, may continue for some little time after the fever has subsided. The pulse often presents two distinct types—viz., (1) the full soft pulse one associates with acute rheumatism and (2) the thin and feeble pulse denoting prostration. In two cases I have noted slight anginoid attacks in patients who previously had no signs of cardiac weakness. An erythematous eruption is occasionally seen during subsidence of the fever.

Treatment.—I think one would be justified in treating such cases on the general broad lines applicable to most febrile attacks. Salines, cooling drinks, and an aperient often do good. But remembering the prominence of muscular pains as a symptom, I have found most benefit result from the administration of fifteen grains each of bromide of ammonium and salicylate of soda, with twenty minims of liquor ammoniæ acetatis every four hours. Although such drugging is necessarily somewhat empirical, I have found the most satisfactory results therefrom. It ensures sleep, relief from muscular pains, and a free and grateful diaphoresis. During the acute stage the diet should consist of milk, eggs, and farinaceous puddings; indeed, the patient will not care for more. But during the decline of the fever the prostration is often so great as to demand oysters, beef-tea, and a generous wine. I have found the richer Colonial burgundies particularly beneficial.

Seymour-street, W.

NOTES ON THE ETIOLOGY OF LEPROSY.

BY EDV. KAURIN, M.D.,
DIRECTOR OF THE REKNAES LEPER HOSPITAL AND CHIEF PHYSICIAN TO THE HOSPITAL FOR THE ROMSDAL DISTRICT, MOLDE, NORWAY.

[LAST November my friend Dr. Kaurin published a small pamphlet in support of the contagious theory of leprosy,[1] and illustrated his remarks by over thirty cases taken from the notes of his own patients in the Government Leper Hospital in Molde. Deeming the notes of these cases the most important part of the paper, he has requested me to edit them in English. Dr. Kaurin has long been known to the members of the profession in England, but the prominence given to the subject of leprosy ever since the tragic death of Father Damien at Molokai will give an increased value to any observations proceeding from his pen. The peculiarly abrupt style of Norwegian necessitates some slight modifications to become congenial to English ears; but I hope, in the endeavour to make the notes a little more fluent, I have not done so as at the expense of the literal meaning of the text. It may not be superfluous to add that Dr. Kaurin, in common with nearly all pathologists, recognises two main varieties of leprosy—the tubercular and the anæsthetic; the former characterised by hyperæmic patches, great thickening of the skin and nodules, which may or may not ulcerate; the latter by changes in certain nerves, which lead to anæsthetic areas of skin, with ulcers, bullæ, and wasting of the muscles supplied.—G. LINDSAY JOHNSON, F.R.C.S.]

My object in this paper is to set before the profession the results of my observations on the origin and nature of leprosy. In the first place, we will examine those cases in which no history of previously existing leprosy can be traced. Since my assuming the management of the Reknaes Hospital in 1881, ninety-five lepers have been admitted. Out of these forty-eight, or about half, have acquired the disease—that is to say, no leprosy had previously existed in their families. In most of these forty-eight cases I have been able to prove more or less intimate intercourse with lepers, and it has been quite an exception to find a patient

[1] Betragtninger og lagttagelser over Spedalskhedens Aarsagsforhold, published in the Norsk Magazin for Lageirdenskaben, Nos. 3, 5, and 6, 1889.

who assured me that he had never come in contact with other lepers. When I use the word intercourse, one must remember what the word means among our peasantry. Everyone who is acquainted with the habits of our poorer classes, especially those along the coasts, who nearly all ive in reduced and miserable circumstances, will quite understand the full meaning of this word. For they not only use the same knives, forks, spoons, and pipes, but even the same bedclothes and wearing apparel. Their houses are, for the most part, small, miserable, and badly ventilated. They rarely wash, and, qwing to vermin—which abound,—they suffer from numerous sores. They are accustomed to great privations, their food is bad and insufficient, while their isolated condition, coupled with extreme poverty, exert a most baneful effect on their minds. All these things tend to impair the functions of the cells and diminish their natural power of resistance against the germs of disease, and one can readily understand what intercourse under such conditions must lead to, in the presence of a bacillous disease like leprosy.

In the following history of disease, we must bear in mind that the duration of the disease is much longer than is generally supposed. The patients, as a rule, take no account of the long prodromal stage, marked by indefinite subjective phenomena and temporary affections of the skin. The physicians themselves often overlook the early symptoms of the disease; indeed, it is sometimes impossible to form a diagnosis in the early stages. The whole period of the disease, from the onset to the time when distinct signs are noticeable, amounts to at least from three to four years. This period may be subdivided into two equal times—a period of incubation and a prodromal period. The following statements must be considered as showing the strong probabilities in favour of the contagiousness of leprosy rather than as absolute proofs, because one cannot always rely on the statement of the patient when he asserts that there is no leprosy in the family. It may be objected to my theory of the contagiousness of leprosy that a most intimate intercourse may have continued to exist between the members of a family where one is affected with leprosy without any signs of the others having become affected. Such objection cannot be entirely ignored, but I think it merely proves that leprosy is not a very contagious disease, and that it requires peculiarly favourable conditions to enable it to spread in the human body. It is useless in our present state of knowledge to find a solution to the question. Until leprosy gets comparatively rare in our country and we can study it in districts nearly free from the disease, we cannot hope to understand the question in all its bearings. *I for my part am convinced that it is very seldom that we can find a leprous patient whom we cannot trace to have had intercourse with other lepers.*

CASE 1.—Hans Olaus J——, sailor, aged twenty-one, was admitted to hospital in 1881. Has been suffering from the anæsthetic form of leprosy for the last seven years. No family history of leprosy. He acknowledged having had intercourse with a leprous woman living near his house sometime before symptoms of leprosy appeared.

CASE 2.—Ole K——, fisherman, aged twenty-eight, was admitted in 1881, suffering from tubercular leprosy. Symptoms for the last twelve years. No family history of leprosy. In 1860 and later he slept for some years in the same bed with a leper named Even K—— (admitted here in 1869 suffering from severe tubercular leprosy, and at the time in his father's service). He had one brother and one sister, both healthy. They had never slept with the servant. The parents lived in a very destitute condition.

CASE 3.—Karen Helene O——, peasant's daughter, aged thirty-four, was admitted in 1883; in advanced anæsthetic form (fifteen years' duration) Parents free from leprosy. Father had married twice, the first time to a leprous woman. From this marriage he had three sons; of these, one was admitted in 1862 with tubercular leprosy. The second marriage was with a healthy woman, and they had issue Karen Helene above mentioned. When Karen was about two years old a leprous woman used frequently to come every time to take the child to bed with her.

CASE 4.—Jens A——, peasant, aged fifty-nine, was admitted in 1883 with far advanced anæsthesia. No leprosy in the family. He confesses he has had leprosy for the last three years, and the district physician had placed him in the infected list seven ears ago. Seven years ago he bought an old coat which had belonged to a deceased leper, and he wore this coat for a long time.

CASE 5.—Nicholai W——, peasant, aged forty-seven, was admitted in 1887 with tubercular leprosy. The disease had lasted eight years. No family history of leprosy, but he said he had kept company with a leper who lived on the next farm some time before the appearance of the disease.

CASE 6.—Annika G——, a peasant's wife, aged sixty-four, was admitted in 1885 with advanced tubercular disease. Disease had existed fifteen years. No family history of leprosy. He had constantly kept company with a woman who lived on the neighbouring farm before she showed signs of leprosy herself.

CASE 7.—Endre O——, peasant, aged fifty-seven, was admitted in 1885 with anæsthetic leprosy. Had suffered thirty years. No other members of his own family are known to have been diseased. His mother married four times. He had, however, a leprous half-sister, with whom he grew up and kept company.

CASE 8.—Gorgen N——, aged fifty-four, was admitted in 1886, suffering from the nervous form in the stage of infiltration. No leprosy in the family. Patient had been diseased one year. He had kept company and eaten at the same board with a leprous woman who lived hard by, and had, moreover, associated with a man affected with leprosy.

CASE 9.—Garo I——, peasant's wife, aged forty-five, was admitted in 1886 with tubercular leprosy of a year and a half's duration. No family history of leprosy. She had been married twenty-five years. Her husband was free from disease, and they had had three healthy children. On the same farm there was a leprous woman whom she was in the habit of nursing.

CASE 10.—Fedri A——, peasant's wife, aged forty-four, was admitted in 1886 with tubercular ulceration of twelve years' duration. She had been married sixteen years to a healthy husband, and has had five healthy children. None of the family are leprous. For five years she had lived in a hut along with lepers. The last year she lived there she showed signs of leprosy. She lived in very poor circumstances, and was exposed to much privation.

CASE 11.—Bolla O——, a peasant's wife, aged thirty-three, was admitted in 1886 with tubercular disease of nine years' duration. She has been married ten years. Her husband is free from disease and her two children are also healthy. When she was about thirteen years old, a leprous boy, who had running ulcers on his body, was in her father's service. She does not remember sleeping with him, but she thinks she may have used his bedclothes.

CASE 12.—Halsten O——, a peasant, aged forty-eight, was admitted in 1887 with advanced anæsthetic leprosy and extensive necrosis of the bones of the right foot. No leprous family. The disease has lasted five years. He has been married twenty-four years. His wife was healthy, but her sister was leprous, though he denies having had intercourse with her. He lives on a small farm where two lepers lived. With these he often associated before they were sent to the hospital. (These lepers were removed to the hospital suffering from tuberculous ulceration.) They were both of them leprous long before he was taken ill.

CASE 13.—Gurianus K——, a peasant's son, aged thirty-three, was admitted in 1887 with advanced tubercular disease of sixteen years' duration. He lived in America for nine years and a half, but overwork and privation had made him worse. He returned home a year and a half ago. He had had intercourse with a number of leper women in Norway, and notably with a leper girl named Marie H——, before he himself became attacked. This girl lived on the neighbouring farm, and was admitted in 1875 suffering from a severe form of tubercular leprosy. She was born in Tönset of a healthy family. When thirty-two years old she came to Nordmöre and served in various leprous families. Seventeen years afterwards she was attacked with leprosy.

To be concluded.)

LEEDS SCHOOL OF MEDICINE. — The eleventh annual dinner of past and present students of this School will be held at the Great Northern Hotel on Friday, Jan. 31st, 1890. President, Edward Atkinson, Esq., F.L.S., surgeon to the Leeds General Infirmary. The honorary secretaries are Messrs E. B. Collings and Charles Forsyth.

THE EAR IN CRIMINALS.

BY H. HAVELOCK ELLIS, L.S.A.

EVEN non-scientific observers have noted the frequency among criminals of projecting or of long and voluminous ears. In the answers to my Questions issued to medical officers of prisons I found that the prominent ears of criminals were more generally recognised than any other abnormality. Thus, Dr. V. Clarke says: "The largely developed external ear is a common feature"; others speak of "ears often large and outstanding" &c. Lombroso finds the ear "ad ansa," as he calls it,—the handle-shaped ear—in 28 per cent. of his criminals; Knecht in 22 per cent., Marro not more frequently than among ordinary people. Ottolenghi, who has recently examined the ears of nearly 600 criminals and of 200 normal persons, finds that while among the latter it is found in 20 per cent., among the former it is found in 39 per cent, the percentage varying from 35 among thieves to 42 among those convicted of assault and wounding. This observation is, indeed, by no means of recent date. In reading lately that curious treatise of mediæval physiology, Michael Scott's "De Secretis Naturæ," I found that a very bad character is given to those persons whose ears are uncommonly long, or ample transversely; they are bold, vain, foolish, incapable of work. To come down to comparatively recent times, Grohmann in 1820 noted the prominent ear as a marked characteristic of the criminal. Morel studied the abnormalities of the ear, especially in relation to heredity; and in England, Laycock fully appreciated their value as indications of degeneration.[1] Dr. Langdon Down, working on the same lines as Laycock, points out in "Mental Diseases of Childhood" the frequency of congenital ear deformities in idiots and the feeble-minded, associated often with webbed toes and fingers; also an implantation of the ears farther back than normally, giving an exaggerated facial development. In France, Italy, and Germany there has within the last two or three years sprung up a considerable literature on the subject, of which Frigerio's little book, "L'Oreille Externe, Étude d'Anthropologie Criminelle" (Paris, 1888), is perhaps the most valuable. Dr. Frigerio, who has devoted special attention to this feature both among criminals and the insane, finds certain peculiarities very common, and also notes various anomalies of movement in the pinna and its partial hyperæmia, especially in neurotic subjects. From the examination of several hundred subjects, he concludes that the auriculo-temporal angle (measured by a special otometer from the edge of pinna to the mastoid) undergoes a gradual progression from below 90° in the normal person, above 90° among criminals and the insane, up to above 100° among apes. He found the large angle very marked in homicides, less so in thieves. The longest ear Frigerio has ever seen in man or woman was in a woman convicted of complicity in the murder of her husband; the left ear was 78 mm., the right 81 mm. (the normal being 50–60 mm.) in length. Her father, her two sisters, and three cousins all possessed excessively large ears, and were all convicts. The degenerative variations to which he attributes most importance are the Darwinian tubercle—i.e., a pointed projection in the outer margin of the ear,—frequent among the insane and criminals, the doubling of the posterior branch of the fork of the antihelix, and a conical tragus (very frequent in childhood and among apes) often found among the insane and criminals. Féré and Séglas,[2] who examined over 1200 subjects—healthy, insane, idiot, and epileptic—found anomalies frequent among epileptics, and especially so among idiots, but not notably more frequent among the insane than among the sane. They especially noted the number of abnormalities frequently found in the same subject; and also a connexion between defects in the ear and sexual abnormalities.

The most common (so-called) atavistic abnormalities of the ear—i.e., those most frequently and prominently seen among the anthropoid and other apes—are the Darwinian tubercle,[3] absence of one of the branches of the fork, absence of helix, effacement of antihelix, exaggerated development of root of helix, absence of lobule. Adherent lobule may frequently be observed in well developed individuals; it is not found among apes, and appears to have no special significance.

The projecting ear has usually been considered as an atavistic character, and with considerable reason, as it is found in many apes, in some of the lower races, and it corresponds to the usual disposition of the ear in the fœtus. Marro prefers to regard it as a morbid character because it is so frequently united with true degenerative abnomalities, and because it is not always found in the lowest human races; Hartmann, for instance, having found it frequently among the European peasants, and in Africa more frequently among Turks, Greeks, and Maltese than among the indigenous fellaheen, Berbers, and negroes of the Soudan. Among so low a race as the Australians the ear is often, I have noticed, very well shaped. At the same time the projecting ear frequently accompanies deaf-mutism, Dr. Albertotti having found it in sixteen out of thirty-three deaf-mutes.

The ear, it is well known, is very sensitive to vaso-motor changes, slight changes serving to affect the circulation visibly; so that in pale, nervous people a trifling emotion will cause the ears to blush. Galton tells us of a schoolmistress who judges of the fatigue of her pupils by the condition of their ears. If the ears are white, flabby, and pendant, she concludes that the children are very fatigued; if they are relaxed but red, that they are suffering, not from overwork, but from a struggle with their nervous systems, rarely under control at the age of fourteen or fifteen. If this kind of sensitiveness is not common among criminals, a few of neurotic temperament, as well as some lunatics, possess the power, rare among normal persons, of moving the ear. Frigerio notes movements of the superior and posterior muscles, especially when touched; in apes the transverse muscle also acts. Frigerio connects this power of movement with perpetual fear, always on the look-out; many of the criminals with this peculiarity were recidivists, and three of the lunatics had delusions of persecution.

The interest of these investigations, now so actively carried on, into the malformations of the pinna among criminals is obvious. A few ingenious persons have sought to explain some of them by the influence of the headgear, pulling of the ears, &c.; but on the whole it is generally recognised that they are congenital. The study of them, therefore, is of distinct value in enabling us to fix the natural relationships of the criminal man. There is still need for careful series of observations on criminals, the insane, epileptics, and idiots, and every such series should be controlled by a similar series of observations, by the same observer, on ordinary subjects.

Redhill.

[1] Lectures on Physiognomical Diagnosis of Disease: Medical Times, 1862.

[2] Contributions à l'Étude de quelques Variétés Morphologiques de l'Oreille Humaine. Revue d'Anthropologie, April 15th, 1886.

[3] Schwalbe, who distinguishes five principal forms of the Darwinian tubercle, regards it as normal, and believes that with a little practice it might be discovered in nearly all ears. This may well be, but in its distinctly marked form it can scarcely be called normal.

TREATMENT OF DIPHTHERIA.

ILLUSTRATED BY CASES.[1]

BY R. W. SUTTON BARRACLOUGH, M.D., L.R.C.P.

I WOULD speak of the treatment of diphtheria under four heads. First, with regard to the general hygienic surroundings of the patient; secondly, as to general treatment; thirdly, local treatment; and fourthly, tracheotomy. Concerning the hygienic treatment, the patient should be placed, if possible, in a spacious, light, and airy room, the top of the house being preferable. The apartment should be ventilated by a window being kept open some inches at the top, according to the condition of the external air. The register of the stove should be kept open, and if the weather is cold and damp, a fire should be kept burning. The temperature of the room should be kept equable at about 65°. The floor should be bare, all carpets, curtains, &c., being removed. The cupboards, drawers, and all other

[1] From a paper read before the Brussels Medical Graduates' Association.

closed articles of furniture should be emptied of their contents; in short, the more bare the room is made the better. The patient should lie upon a horsehair mattress, placed upon a chain-spring mattress. The bed should be so placed that both sides are easily accessible, and should not be in a draught. A sheet should be hung over the doorway externally, and this should be kept sprinkled with a diluted solution of carbolic acid. A steam-kettle should be kept gently steaming, into which is put from time to time a little carbolic acid; this answers the double purpose of keeping the air of the room slightly moist, and also of disinfecting it. The floor should also occasionally be sprinkled with diluted carbolic acid. All the excreta should be thoroughly disinfected with carbolic acid before being removed from the room, as also should all vomited matter; pockethandkerchiefs, if used, should be burnt, and all portions of membrane thrown off from the parts affected, by vomiting or otherwise, should also be burnt.

With regard to the general treatment, the patient must be kept in bed. The nourishment should consist of plenty of strong beef-tea, milk, and raw eggs beaten up with milk. Essence of beef is very valuable, especially in the case of children, who will readily take a small teaspoonful of it, when sometimes they will resolutely refuse to drink ordinary beef-tea. Ice is a very valuable adjunct to milk, and small pieces of it may be sucked with benefit.

With regard to the administration of alcoholic stimulants, I feel certain that in all severe cases of diphtheria there will come a time when they must be administered even to the youngest children. At first it may not be necessary to do so; if the pulse is not very rapid and is of good power, alcohol may perhaps be omitted. I say "perhaps," but we must not hesitate to give it instantly upon the slightest evidence of weakness of the heart's power; and I must say I think it better to be forearmed by giving it early rather than to wait until symptoms of exhaustion begin to show themselves, which may set in very rapidly, before doing so. Brandy is the form of stimulant I would most rely upon, given in doses and at intervals according to the necessities of the case and the patient's age.

With regard to treatment by drugs, the medicine I am in the habit of trusting mostly to is the solution or tincture of perchloride of iron. This, combined with liquor ammonii acetatis, for its action on the skin, I am in the habit of prescribing in large doses from the first. Young children bear it well; it does not seem to irritate their stomachs, and I believe that it exercises a beneficial action upon the mucous membranes with which it comes in contact. Bark and ammonia or quinine are preferred by some practitioners, but I must say I prefer the perchloride of iron. Concerning the local treatment of diphtheria, I cannot but feel that I ought to have placed this first, since it is *par excellence* the treatment upon which I most rely to fight this terrible enemy. Now, local treatment, to be of any real value, must be thoroughly and indefatigably carried out, and from the results which I have obtained I can say that in proportion as we thoroughly carry it out, so will our success be. It, however, requires an immense deal of patience and perseverance on our part to do so, especially in the case of young children. Naturally they resist at first, even our efforts to look into their throats, but with firmness and kindness it is surprising how quickly they lose all their fears. Should there be any great difficulty in thoroughly inspecting a child's throat, who is, or who is suspected to be suffering from diphtheria, I make it a rule to roll the child up tightly in a blanket, confining the arms, and, if necessary the legs also, by then placing him on the nurse's lap, the matter being thus very much simplified, we obtain our view; it may, however, be necessary to lever the jaws open, and for doing this I prefer using the handle of a flat ivory paper knife, turning it edgeways after having inserted it between the teeth. By adopting these means it is possible always to get a good and thorough view of the throat and also to apply our local remedies. After carrying out this plan several times, the child, as a rule, submits quietly to our manipulations. Before proceeding further, I cannot lay too much stress upon the necessity of having a thoroughly reliable trained nurse in all cases of diphtheria occurring in private practice—one in whom the medical attendant can place every confidence that his directions will be carried out to the very letter.

Various local applications are recommended in the treatment of diphtheria, and each, no doubt, justly has its advocate. Amongst them I would enumerate hydrochloric acid applied to the surface with a brush, also a solution of nitrate of silver applied in like manner. Lime-water, which is said to dissolve the false membrane, is recommended by some; then, again, the solution of permanganate of potash, and a dilute solution of carbolic acid, with many others. But the application which I, in common with others, have found most reliable is the liquor ferri perchloridi fortior. I thoroughly swab the parts affected with this three or four times in the twenty-four hours, according to the severity of the case. It should be applied with a large, full camel-hair brush, one that will spread like a sweep's brush when it comes in contact with a surface. The solution should be used freely, and I am in the habit of giving the brush a rotatory motion when in the fauces, thereby ensuring that the application comes in contact with all surrounding parts. With regard to the local action of this solution, in the first place, I think, it has powerful antiseptic properties; it is also a powerful topical astringent, and, by acting as such, there is no doubt that it soaks through the false membrane, and so comes into contact with the ulcerated surface to which it is attached, thereby constringing the bloodvessels and lymphatics, and so tending to prevent the absorption of the virus by that surface into the general circulation. Then, again, according to my observation, it appears to coagulate, or, if I may use the term, "to tan" the false membrane, hardening it and causing it to curl upon itself, by separating from the parts to which it is attached at its edges. The action of the brush also gently detaches loosened portions of membrane. Another good result of this application is that it trickles down the patient's throat, over the epiglottis, and down the œsophagus, thus constringing the mucous membrane of those parts, and possibly thereby, together with its antiseptic action, tending to prevent the spread of the disease to them. Furthermore, the irritation of the fauces by the brush generally causes vomiting; this emetic action dislodging and bringing away large portions of membrane and detritus which otherwise would lie about the folds of the pharynx, and there decompose or be swallowed. I think this emetic action is of great value.

In addition to the free and frequent use of the perchloride, I am in the habit of having the fauces sprayed every half-hour with a diluted solution of the liquor sodii chloridi, of the strength of one drachm of the solution to one ounce of water. This spray thoroughly disinfects the secretions of the throat, and some of it is carried by the inspired air into the larynx, there acting in the same manner. In not one of the cases occurring under my own care, in which I have carried out this local treatment, has the disease spread to the larynx. When the disease extends to the nostrils, they should be thoroughly syringed out with the liquor ferri perchloridi fortior, reduced by the addition of two parts of water to one of the liquor, three or four times in the twenty-four hours. This frequently brings away large shreddy pieces of membrane.

It may be said that this treatment gives the patient very little chance of rest, and that it is very difficult and dangerous to the attendant to carry out. With regard to the frequent disturbance of the patient's rest, I am of opinion that the word "rest" must scarcely be admitted into the treatment of diphtheria in its first or acute stage. "Rest" seems to me in this case to almost mean "death." With regard to the difficulty of carrying out this treatment, this, like all other difficulties, must be overcome by indomitable perseverance on our part. No sense of fear for oneself must be allowed to step in for one instant. There is no doubt that both medical attendant and nurse run the gravest risk when attending cases of this disease. But once having undertaken the treatment of the case, it is our duty to run all risk. I am in the habit of saying that, "when attending a case of diphtheria, we can only feel that we have 'thoroughly' done our duty if we can say that we have done all we can to catch the disease ourselves."

I must now speak of the treatment of diphtheria when it affects the larynx. Here the treatment assimilates itself to that of croup. An emetic of ipecacuanha should be administered, and this should be repeated if necessary. If the local treatment I have previously recommended, however, be thoroughly carried out, I believe that the cases where this occurs will be few.

Of a series of eleven cases occurring consecutively in my own practice, where that treatment was pursued from the commencement of the disease, in not one instance did it extend to the larynx, and every one recovered. In three

cases, however, to which I was called in consultation, and in which no local treatment had been carried out, the disease had spread to the larynx, and they all died.

When the larynx has become implicated and the respiration shows signs of becoming impeded, the propriety of performing tracheotomy has to be determined upon. Some, I believe, are averse to the performance of this operation at all for this disease, contending that the patient nearly always dies afterwards. My own opinion, however, is that it should always be performed early, should symptoms of impeded respiration begin to show themselves. If it is clear that the obstruction is in the larynx or trachea, or both, then the sooner tracheotomy is performed the better chance is there of recovery. The patient must not be allowed to die from suffocation. Of course I need hardly say that the condition of the lungs should be ascertained beforehand, for if the obstruction to respiration be in them, from an extension of the disease through the bronchi, or from collapse of a considerable portion of lung tissue, it would be of little use to open the trachea. What, then, are the conditions which should lead us to determine to perform tracheotomy. I would answer, that if the respiration is becoming rapid with stridulous breathing, if the chest walls are drawn in even slightly during inspiration, and if the patient is becoming more restless and the countenance anxious, and provided that the state of the lungs does not contraindicate it, the sooner the operation is performed the better chance is there of recovery. After the operation has been performed, the cannula must be kept thoroughly cleansed, and constant watchfulness will be necessary to prevent it becoming clogged with portions of membrane.

It must be remembered that in proportion to the difficulty of getting air *into* the lungs, through the obstructed larynx, in like manner there may be difficulty in getting air *out* of the lungs from the same cause, thereby giving rise to pulmonary emphysema. Even after the trachea has been opened respiration may still be impeded by portions of false membrane or purulent mucus obstructing the passage, and the act of trying to remove these by suction of the mouth, through a tube or otherwise, has caused several heroic members of our profession to lose their lives. A ready method of removing diphtheritic and croupy exudations from the trachea after tracheotomy devised by myself, in the form of an aspirator, which may be extemporised on the spot, was described in THE LANCET of Dec. 13th, 1884. In the ordinary quart aerated-water bottle, with syphon tap, as supplied by most chemists and aerated-water dealers, we have all the apparatus that is required, with the exception of a foot or two of rubber tubing, and two or three metal unions, made to fit the different sized tracheotomy cannulas; but even these unions may be dispensed with. The rubber tube is slipped over the tap, and one of the unions is affixed to the other end. To produce the vacuum, the bottle is immersed up to its neck in a large tin saucepan or other suitable vessel containing water. The water, with the bottle thus immersed, is then brought to the boiling point by placing the vessel over a fire, the syphon tap being kept open to allow of the escape of the expanded air. The bottle is retained in the boiling water until air ceases to escape from the tap, when the bottle is removed from the boiling water and placed aside to cool with the tap closed. When it has cooled, a vacuum will have formed, possessing great suction power. The apparatus can be made by anyone in a case of emergency with an ordinary bottle, having a closely fitting perforated cork, through which passes a piece of glass tube, on to which the rubber tube can be affixed. In this case, when the vacuum has been obtained, it can be preserved by clipping the tube with a clip or by tying it.

(To be concluded.)

OCCURRENCE OF A RASH IN INFLUENZA.

By H. P. HAWKINS, M.B., M.R.C.P.

ONE frequently sees a patchy erythematous rash mentioned in connexion with the present epidemic, but I have found no more precise description. About 1000 cases of influenza have now been seen at St. Thomas's Hospital. Of these a large number have been fairly accurately examined, and all have been asked if they have or have had any rash. As the result, six cases have been seen to have an eruption presenting a certain degree of similarity in appearance and position, and the patient in a seventh case described an eruption which seems to have been of the same nature. One man was covered with well-marked urticaria, and a large number had labial herpes.

CASE 1.—J. C—— came to the hospital as an out-patient. He had a roughly circular patch slightly raised over the back of each elbow, passing at its periphery into patches and spots of similar appearance, especially numerous along the back of the forearm. The colour was the bluish-red, such as is seen on the cheeks in measles, disappearing completely under pressure. A similar condition existed on the legs; there was a large patch on the patellæ, with smaller patches and spots down the shins. There was a slight blush on the chest, but nothing more than is often seen in fever from any cause. This patient had had eighty grains of salicylate of soda before the rash appeared. A few days later, while the rash on the arms was fading, a crop of spots arose on the backs of the hands, of urticarial appearance, considerably raised and paler than the surrounding skin, but not itching.

CASE 2.—W. B—— had a similar rash to Case 1 on the front of the knees and shins with a slight blush on the chest, but nothing on the arms; he had no medicine before its appearance.

CASE 3.—H. D. L——. The arms showed the same rash, but it was on the flexor surface, and there were a few spots on the legs The patient had had no medicine.

CASE 4.—H. S——. The chest, abdomen, and back of this patient were covered with a continuous bluish-red rash, which, judging from the edges and outlying spots, was probably composed of confluent patches; it ceased abruptly at the level of the clavicles. The elbows and knees had the same appearance as those of Case 1; there was the same patch on the olecranon and patella, with discrete spots around; the colour was the same, but it was rather fainter. This patient had had a saline draught, but no quinine, antipyrin, or salicylate of soda, the three chief erythema-producing drugs.

CASE 5.—H. T——. The elbows and backs of the forearms exhibited an eruption having the colour, appearance, and arrangement described under Case 1. This patient had had no medicine.

CASE 6.—N. B——. The elbows and backs of the forearms were spotted as in Case 1. From the middle of the front of the thigh to the ankle on both sides, having its greatest intensity and degree of confluence over the patella, was a livid, slightly raised hæmorrhagic eruption in spots and patches; there was not a single spot to be seen on the backs of his legs. This patient had had no medicine, and had never suffered from purpura before.

CASE 7.—This patient, a woman, did not come to the hospital until she began to suffer from the secondary bronchitis. She said that on the day after the onset of the illness her chest and abdomen became covered with large "red blotches and spots," without itching; but she had noticed nothing on her arms or legs.

These seven cases certainly bear a family resemblance, but their number (7 out of 900) is so small that one would hesitate to admit for the rash any relation to the specific disease influenza, unless its occurrence has been noted at the other large hospitals.

St. Thomas's Hospital.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

CASE OF RHEUMATIC FEVER.

By W. EVELYN ALSTON, M.D. ED.,
SURGEON-MAJOR.

FEW cases give rise to more anxiety to the medical attendant and are of greater moment to the unfortunate sufferers than those of acute rheumatism; may it not be added too that few cases of acute disease in their treatment are less satisfactory? I place, therefore, before the readers of THE LANCET the case of my own son, a fast-growing lad of sixteen, whose recovery from this disease has been very remarkable. I must premise that last year, as for the previous two years, I moved with my family to Ilkley for the summer holidays, and that ten days before the termination of the tenancy of my house on Sept. 16th, the lad was laid up, unable to move, both knee-joints being

especially painful; the morning and evening temperature was 100° and 102° respectively.

On the following day, the 7th, a copious deposit of lithates was present in the urine, with sore-throat. Temperature 100° and 101·4°. On the 8th the right arm was painful and the throat more inflamed. The lithates had disappeared. The next day the left wrist was painful and swollen, and on the following four days I note that the right ankle and the left and right knees again became inflamed. The average morning and evening temperature was 100·6° and 101·2°. Being obliged to clear out of my house on the morning of the 16th, it became an anxious question as to what was best to be done. The patient was extremely weak, and the left knee-joint acutely painful. Lodgings, with their attendant discomforts, or a trial of what seemed to me a rational treatment by steam and other baths, with the cheerful surroundings of the Craiglands hydropathic establishment, were the two alternatives. Deciding upon the latter I accordingly asked Dr. Dobson, to whom I was known, to kindly come and see my son, which he did, and remarked that "the sooner he comes to me the sooner he will get well." Accordingly on the following day, the 14th, the patient was with much difficulty, owing to the condition of the knee, removed to Craiglands, and carried straight into the so-called Russian bath; profuse sweating of course took place, but he was able on coming out to stand on the affected limb, and with assistance hobble to his chair and thence to bed. On the 16th he was able to sit up and walk to the w.c. On the 17th he was able to walk downstairs to the bath and back; and since this he has made steady and uninterrupted progress, so that on the 28th I find he was able to take a walk of about two miles and a half in this hilly place.

With regard to treatment antecedent to his removal to Craiglands, sinapisms locally, and salicine in five-grain doses for the first twenty four hours, and subsequently full doses of alkalies, with ten and five grains of quinine morning and evening, were given; yet at the end the patient had lost twelve pounds in weight with an undiminished temperature and an acutely inflamed knee-joint; but that in fifty-six hours after taking the baths, and without medicine, he was able to walk downstairs and back without assistance. Such a result, while a matter of much thankfulness to myself, has, I need hardly say, made a deep impression on me in a professional sense; to my brother graduate, however, with his great experience in the efficacy of this treatment, the case presented no exceptional features, and that from the first he had no doubt of the result. Why, may I ask, should not a steam chamber and needle bath be a necessary equipment of every hospital? Not alone in the treatment of acute rheumatism would it often be of the greatest value.

Sandgate.

A CASE OF TRIPLETS, COMPLICATED BY PUERPERAL CONVULSIONS; RECOVERY.

By MARTIN FOX, L.R.C.P.LOND.

IT seems to me that the following case, from its rarity, is worth recording.

In September, 1887, E. H——, aged thirty-two, first came under observation. She stated that she was between six and seven months pregnant. She already had three healthy children, and there was nothing abnormal about her previous pregnancies or confinements. Up to the time of her present illness she had always been healthy and robust, and no history of previous kidney mischief could be obtained. This time, however, from about the fifth month she had noticed some puffiness about her face and lower limbs, which kept increasing in extent. On being first seen it was noticed that the uterus was greatly distended, so much so that it was thought she had made a mistake in her "reckoning." In addition, she presented the characteristic appearance of a person suffering from albuminuria, the whole body, especially the face, lower limbs, and abdomen, being very œdematous. The urine, which was scanty in quantity, was found to be loaded with albumen. Despite medicinal and dietetic treatment her condition did not improve, and in about a fortnight, at 3 A.M., a messenger stated that labour pains had commenced and requested immediate attendance, as the woman was "in a fit." On arrival the convulsion was over, and on examination the os was found to be partially dilated. Before waiting long, however, a second severe convulsion occurred, when chloroform was administered by my then principal, Dr. Holden of Preston. The os now dilated rapidly; on rupturing the membranes more than a usual quantity of liquor amnii escaped, and almost directly a not fully developed, though living, child was born naturally. The uterus not having diminished much in size, on examination the breech of a second child was found presenting; no difficulty was experienced in bringing down a leg and effecting delivery. Still the uterus was unusually large, and on again examining a third bag of membranes was discovered with the head of the enclosed child presenting. As it seemed expedient to deliver as rapidly as possible, I passed my hand into the uterus, seized a foot, and delivered without delay. A very large, single placenta, with the three cords attached, was in due time "expressed"; there was now some considerable hæmorrhage, the uterus feeling large and flabby, but after "kneading" for a time this soon ceased, and the uterus became firmly contracted. While under the influence of the anæsthetic the patient was not convulsed. Unfortunately, however, the attacks did not end with the delivery, but recurred at intervals throughout the day; between the fits she remained quite unconscious, and as she was unable to swallow, a full dose of chloral was administered per rectum and repeated. This seemed to check the frequency of the attacks, and on the following day she had only one convulsion, and was capable of being roused sufficiently to take nourishment and medicine by the mouth. After this she had no more convulsions, and on the third day she was better, though still drowsy. From this time she kept gradually improving, the urine greatly increasing in quantity, and the œdema decreasing in proportion. At the end of three months, having in the meantime been taking tincture of the perchloride of iron, she was quite restored in health, and the urine was free from albumen.

I may state that all three children lived for a time—one died a month after birth, another in two months, while the third lived for seven months before it succumbed to mesenteric disease. To complete the history of the case, I must add that the woman has had no subsequent illness, and is at the present time in good health, having been again confined of a healthy child now some six months ago.

Coleshill.

RUPTURE OF PERINEUM; IMMEDIATE OPERATION; SUCCESSFUL RESULT.

By J. M. SMITH, M.B.

THE short notes of the following case may have some interest for those readers who practise midwifery.

On Sunday, Sept. 8th, I was called about 11 A.M. to Mrs. K——, a primipara, aged twenty-six, for her confinement at full time. She seemed a healthy, well-formed woman, though rather short in stature. On examination I found everything all right—a head presentation, with full-sized pelvis. The pains were regular and strong. There was no unusual rigidity of the perineum. I called again at 2 P.M., when the os was fully dilated and the pains strong. At 3 P.M. the head descended on the perineum, and the bearing-down pains became very strong, with short interval between, the labour terminating about three-quarters of an hour afterwards. Recognising danger to the perineum, I gave all the support to it I could, after the manner recommended by Dr. Playfair; but, in spite of all my efforts, as the head was rounding the arch of the pubis, the perineum gave way, and the birth of the shoulders caused the rent to go right back and through the sphincter ani. The child was very large, and reckoned to weigh between 11 and 12 lb. There was no excessive hæmorrhage, and the patient did not suffer from shock. Believing that such an accident should be surgically treated at once, I exposed the patient to a good light in the lithotomy position, and stitched the wound with three deep sutures of silk by means of a large curved needle. As I got very good coaptation, I used no superficial sutures. Dressing the wound with salicylic wool, and using the catheter, I told the patient to lie on her face as much as possible. I kept the bowels closed till Sept. 16th, when I administered an enema. Next day I removed one of the sutures, and two days afterwards I removed the other two. On the 17th the bowels acted without an enema or medicine, and on examination on the 20th complete union of

the wound had taken place. I saw her frequently till the 28th, when she was sitting up, and said she felt quite well.

I attribute the success of this case to the dry dressings, the position of the patient, and the immediate surgical treatment of the wound. Her temperature never rose over 100·5°.

De Beauvoir-road, N.

TWO CASES OF DISLOCATION AT THE SHOULDER JOINT REDUCED BY KOCHER'S METHOD.

BY CLARENCE BEESLEY, L.R.C.P. & S., &c.

THE following cases of dislocation at this joint, reduced by Kocher's method, may prove of interest to those of my professional brethren who have not tried this plan.

CASE 1.—The subject of this case was a young man, aged twenty, who, two years previously, had suffered from a dislocation which was treated by a French surgeon with the "heel in the axilla." When I saw the patient he was suffering from a subcoracoid dislocation, and he was much pleased at the rapid and easy manner in which it was reduced by the above plan.

CASE 2.—This patient was a man, aged sixty-five, who had dislocated his shoulder by a fall from a ladder. I saw him shortly after the accident, and found a subglenoid luxation. This was also very easily reduced by the same method, which, I may add, consists in first flexing the forearm on the arm, gently pressing the elbow to the side, rotating the humerus outwards, until the forearm is at right angles to the body, and then raising the elbow from the body and rotating it inwards until the hand reaches the opposite shoulder.

Newhaven, Sussex.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

VICTORIA HOSPITAL FOR CHILDREN, CHELSEA.

A CASE OF ACUTE NEPHRITIS AND URÆMIC CONVULSIONS; COMPLETE RECOVERY; REMARKS.

(Under the care of Dr. J. WALTER CARR.)

ALTHOUGH recovery from a condition of acute inflammation of the kidneys in a child is not uncommon even when evidence of uræmic poisoning of the system is present,[1] we consider that the publication of a well-marked case of the disease, in which special symptoms were carefully noted, will be of interest to the profession. Dr. Carr has drawn attention in his remarks to the more important points in the case, such as the absence of dropsy and the presence of cardiac enlargement. The condition of the urine, the specific gravity, and absence of albumen and casts indicated the completeness of the recovery. Pilocarpine was, as usual in children, well borne; it would, however, be as well for our readers to remember its occasional depressing action on the heart.

H. M——, aged six years, was admitted on Feb. 10th, 1889, at 7.30 P.M. The following history was obtained, partly at the time and partly subsequently. He had had measles three years before. There was no history of scarlet fever or of anything pointing to it; no history of chill or of exposure to cold. He had been ailing for a week with headache, chilliness, and slight cough, and had complained of pain below the left nipple. No pain in the loins; no œdema at any time. Bowels irregular; urine thick, red, and scanty; micturition frequent. On Feb. 10th, the day of admission, he was very sick from 4 A.M. to 11 A.M.; he then became unconscious, and between 1 P.M. and 3 P.M. had five convulsive attacks; he then slept till 5 P.M., and afterwards had a screaming fit.

On admission his condition closely resembled that described as "cerebral irritation." He lay on his side, coiled up in bed, restless, and screaming out when touched. Temperature 98·4°. No œdema; no desquamation anywhere. At 9.10 P.M. he had a convulsive attack; pupils dilated, insensible to light, no conjunctival reflex; spasms alternately more on one side than the other. Temperature 100·4° (in rectum). The diagnosis at this time being very uncertain, the house surgeon, Mr. Staveley, drew off three ounces of urine by catheter. This was found to contain nearly half albumen, a trace of blood, and some uric-acid crystals, sp. gr. 1020. Accordingly, as the convulsions continued, one-tenth of a grain of pilocarpine was injected, patient placed in a hot bath, and afterwards wrapped in blankets. Much sweating followed, the convulsive attacks became less severe, and by 11 P.M. had entirely ceased. They did not recur. A dose of compound jalap powder was administered, but speedily vomited. Ten grains of bromide of potassium and five grains of chloral hydrate were given per rectum, and patient slept well afterwards. Temperature: 2 A.M., 102·8°; 6 A.M., 100·8°; 10 A.M., 98·6°; rose once to 100° next day, but never afterwards above 99°. Bowels acted well during the night. Next morning the patient was quite conscious and free from sickness. After midday he began to take food and to pass urine for the first time since admission.

On further examination he was found to be a well-nourished boy, pale, and with rather dry skin; tongue thickly furred. Heart's apex beat in fifth space half an inch outside nipple-line; impulse markedly forcible; slight epigastric pulsation. Cardiac dulness began at third rib, cartilage end, along middle line of sternum; sounds normal; no distinct accentuation of second sound. Pulse hard and rather incompressible. A few scattered râles in lungs. No ophthalmoscopic changes visible. Urine for the twenty-four hours: acid, sp. gr. 1022, albumen ¼, urea 1·3 per cent., a large deposit consisting of numerous epithelial, granular, and hyaline casts, red blood-corpuscles, renal epithelial cells and uric-acid crystals. He has been sweating freely each night, and bowels well open.

Feb. 15.—Heart's apex beat in fourth space just outside nipple, impulse much less forcible, and pulse much more compressible. Urine contains no blood, and only a faint trace of albumen. After this the boy continued to make an uninterrupted recovery, the tongue slowly cleaned, and food was always taken well. The urine passed per diem varied in quantity from twenty to thirty-five ounces; sp. gr. 1015–30; generally no albumen, but occasionally a very faint trace. The casts gradually got fewer in number, and the process of disintegration of epithelial into granular ones was well seen; uric-acid crystals persisted for a long time, but completely disappeared before the patient was discharged. He was kept exclusively on milk and barley water until Feb. 17th, when milk pudding was first given; bread-and-milk on Feb. 21st, fish on March 14th, and meat on March 18th.

March 21st.—He got up. The bowels were kept freely open throughout by frequent doses of saline aperients. After Feb. 16th citrate of iron and quinine (two grains) was given three times a day.

He was discharged on March 29th, looking stout and well. Heart's apex beat in the fourth space in the nipple-line, normal in character. Pulse not of high tension. Urine for the twenty-four hours: sp. gr. 1022, urea 2·6 per cent., albumen a very faint trace, no casts.

Oct. 11th.—Patient, seen to-day, is in good health. In recumbent position the heart's apex beat is in the fourth space; in the erect posture it can just be felt in the fifth space in the nipple-line. No albumen in urine.

Remarks by Dr. CARR.—The leading features of clinical and theoretical interest in this case may be summarised as follows:—1. As to the cause of the nephritis nothing definite could be made out, a much less common occurrence in children than in adults. Whilst the history seemed altogether to exclude scarlet fever, yet the character of the illness and the rapid and complete recovery under treatment point to an acute attack of nephritis uncomplicated by any chronic renal disease, and to the scarlatinal form rather than to the more intractable variety due to chill. 2. The case illustrates the statement of Dr. Saundby[2] that uræmic convulsions and vomiting are not of very serious significance in the acute nephritis of children. 3. The rapid rise of temperature with—and

[1] Eustace Smith: Diseases of Children, p. 41. Wright and Ashby, p 226. Saundby: Lectures on Bright's Disease, p. 61.

[2] Lectures on Bright's Disease.

apparently exclusively due to—the convulsive attacks, is interesting as an illustration of the statement of Dr. Gowers[2] that severe convulsions, whatever their cause, always produce fever, so that in such cases the thermometer gives little assistance in diagnosis. The ultimate cause of the pyrexia is obscure, but inasmuch as rapidly repeated convulsions leading to the status epilepticus tend to cause hyperpyrexia, and as the latter is also often due to cerebral injuries, we may assume that convulsions also lead to fever by some damage to the brain, and probably through the cerebral circulation. Is it by producing cerebral anæmia? 4. The changes observed in the condition of the heart were of great importance. On admission, the apex beat was in the fifth space half an inch outside the nipple-line. This would hardly have been due solely to hypertrophy, as a few days later it was in the fourth space in the nipple-line. On the other hand, the condition was not one of dilatation only, for the impulse had a distinctly heaving character and the tension of the pulse was very high. Probably there was a combination of the two conditions, for it is well known with what extreme rapidity cardiac hypertrophy may occur in children. Certain it is that considerable extra strain was thrown upon the heart, and that so far, inasmuch as no œdema had occurred, that strain had been successfully met; the complaint of pain below the left nipple is very suggestive in this connexion. Are not the marked over-action of the heart and the absence of the dropsy together strongly corroborative of Cohnheim's view that when the kidneys are partially disabled by disease the left ventricle acts with increased energy; whilst, at the same time, a corresponding resistance is maintained in all parts of the arterial system, in order that more blood may be sent through the kidneys, to compensate as far as possible for the imperfect depuration which each portion undergoes in those organs? Immediately vicarious elimination was obtained through the skin and bowels, and the congested state of the kidneys relieved by a simple fluid diet, the heart returned to its normal condition. In an adult with a heart less responsive to such a sudden strain, or in a child weakened by previous illness, the renal elimination would probably have been so imperfect that acute dropsy would have been set up. But this possible absence of dropsy, in cases even of acute Bright's disease with uræmic convulsions, when it would be most expected, of course renders the immediate examination of the urine a matter of vital importance for diagnosis and treatment. In Dr. Dickinson's work on Albuminuria a case of scarlatinal nephritis is described, fatal from uræmia, but with scarcely a trace of œdema. 5. The rapid improvement following the injection of pilocarpine is interesting. Is it possible, as Dr. Lauder Brunton suggested in the Croonian lectures, that the alkaloid may act as a direct antidote to some poisonous matter in the blood? 6. Another noteworthy point is the persistence of uric acid in the urine, as if some defect of eliminative action remained after all other signs of renal mischief had disappeared. Could it be due, as Dr. Saundby has suggested, to an excessive quantity of milk being given? The fact that it disappeared when the patient had a more mixed diet is significant. I have noted the same occurrence in a child recovering from scarlatinal nephritis and fed mainly on milk. It would be interesting to know whether it is common. Dr. Dickinson states that "sometimes in the later stages, when the urine is no longer scanty, a considerable deposit of uric acid may be noticed, such as to indicate a positive increase in its excretion, as if the kidneys with returning function were removing an accumulation."

LEPER ASYLUM, TRINIDAD.

LEPROSY AND ELEPHANTIASIS ARABUM IN THE SAME PATIENT; AMPUTATION OF THIGH; DEATH FROM PYÆMIA; NECROPSY; REMARKS.

(Under the care of Dr. BEAVEN RAKE.)

THE association of elephantiasis Arabum with leprosy is of considerable rarity, but has sometimes been met with in India. We are not aware that this has been seen in Norway, where the former sometimes arises. Vandyke Carter says, "that in India the two maladies do not very seldom occur in the same locality," and since both are attended with a similar form of fever the combination of the two is interesting. Vincent Richards[1] writes, "The theory that there is an analogy between the two diseases has long since been exploded. It will nevertheless be interesting to note that the diseases are sometimes associated either in the sufferer himself or through his family." Out of 636 sufferers from elephantiasis Arabum noted by him in Balasore, 40 were in some way associated with the disease, 2 were suffering from leprosy, 1 was a leper, and his father and brother also suffered, 6 had a brother or sister affected with leprosy, in 6 the mothers and in 9 the fathers were lepers; in the others the relationship was more distant. He considered the percentage thus shown unusually high. Except in the case now recorded, Dr. Rake has never seen this combination.

Etienne P——, aged thirteen, coloured boy, was admitted to the asylum on Sept. 6th, 1884, with mixed leprosy of one year's duration. He was born in Trinidad. The face and extremities presented numerous small tubercles, and on the trunk and extremities were smooth, glistening patches, darker in colour than the rest of the skin. Sensation was impaired in the fingers and toes. The right leg was much swollen, the comparative circumferences being as follows:—

	Right.	Left.
Middle of leg	15 in.	... ... 10⅞ in.
Over malleoli	15 ,,	... ... 10½ ,,
Middle of dorsum of foot.	11½ ,,	... ... 10 ,,

He was put on gurjun treatment externally and internally.

Dec. 4th.—Fever and pain in leg.

13th.—Circumference of right leg, 15½ in.; circumference of dorsum of foot, 11½ in.

Jan. 10th, 1885.—Fever; shivering; left foot becoming œdematous, but only up to the ankle. Small pustules on the right leg, and much perspiration. Urine: sp. gr. 1008, no albumen; slight deposit of mucus.

24th.—Fever has gone. Circumference of leg, 15½ in.; of foot, 12 in.

Feb. 11th.—Circumference of leg, 16 in.; of foot, 11 in. Fever again. Femoral and inguinal glands enlarged.

14th.—Patient was put under chloroform, and six incisions were made in the right leg through the skin and tough horny subcutaneous tissue nearly down to the periosteum. Each incision was about 1½ in. long. They were plugged with carbolised lint, and drainage-tubes were inserted in two of them.

15th.—Temperature 99·6°; pulse 96. Incisions gaping; discharging well.

17th.—Circumference of leg, 14 in.; of foot, 11½ in. Skin more supple; free discharge; no inflammation.

26th.—Circumference of leg, 13¼ in.; of foot, 11¼ in. Has been in bed since operation.

March 3rd.—Has walked about a good deal. Circumference of leg, 13½ in.; of foot, 12 in.

April 30th.—Circumference of leg, 16½ in.; of foot, 12½ in. Skin thick, hard, and nodulated at lower third of leg.

May 16th.—Circumference of leg, 15½ in.; of foot, 12¼ in. Ulcers at sites of old incisions becoming gangrenous. As the leg was very heavy and hindered him in walking, besides causing frequent febrile attacks, it was amputated, at his own request and with the consent of his relatives. The limb was removed by anterior and posterior flaps, about 3 in. above the knee, infiltrated tissue being thus avoided. A drainage-tube was put in, and the flaps secured with wire sutures. The amputated limb weighed 12 lb. The thickness of skin and subcutaneous tissue was 1½ in. The fibrous tissue was much hypertrophied, compressing the fat, which bulged out on section. Beneath the deep fascia was a clear, watery fluid lying on the muscles, which were flabby. Just below the knee, the gradual transition of the ordinary connective tissue into elephantoid tissue was well marked. At the lower part of the leg the skin was very nodulated, and there was a hypertrophied cicatrix of one of the old incisions. Microscopic examination of the fluid failed to show filaria or leprosy bacilli. Evening temperature 100°; pulse 85.

17th.—Temperature 102°; pulse 120. Slept fairly well after two grains of opium. Stump dressed; a little smell and some tension on sutures.

18th.—Temperature 100·8°; pulse 120. Some offensive odour, but stump looks healthy.

19th.—Temperature 100·8°; pulse 120. A good deal of suppuration. A few clots came away from drainage-tube. No undue tension on sutures. Urine: sp. gr. 1006; no

[2] Diseases of the Nervous System.

[1] Fox and Farquhar's Skin Diseases of India. Appendix, viii., p. 135.

albumen. Tongue coated. Bowels confined. Ordered half an ounce of castor oil.

21st.—A good deal of discharge from stump. Complains of some pain there. Sleeps and eats well. Oil has acted freely.

23rd.—Healthy granulating surface between flaps. Three sutures removed.

26th.—Temperature 104·7°; pulse 170. Tongue furred; loss of appetite. Oppression in chest; no physical signs. Remaining sutures removed. Clotted pus syringed from drainage-tube. Left foot gone down to normal size. Ordered castor oil and quinine.

28th.—Temperature 101°; pulse 120. Tongue still furred, though oil has acted well. Slight cough. Stump looks well.

30th.—Temperature 102·8°; pulse 130. Tongue still furred. Some smell from stump, but not much discharge. Deep punched-out ulcer over right side of sacrum. Delirium at night. Ordered egg flip and Dover's powder, and iodoform and an air cushion for back.

31st.—Died at 7 P.M. Coma succeeded delirium.

June 1st.—Necropsy showed general wasting. Flaps united well; drainage-tube still in. About ¾ in. of femur denuded of periosteum and lying in a cavity, containing fetid pus. Femoral artery and vein occluded by firm clot. Longitudinal section of femur showed suppuration of medulla for about 2 in. No suppuration in upper part of thigh. Hip-joint healthy. About half a pint of yellow purulent lymph in right pleura. Right base studded with irregular infarcts the size of small plums. Left lung and other viscera healthy. Mucous membrane of bladder healthy. No evidence of lymphatic disease elsewhere. No leprosy bacilli were found in the femoral gland or pulmonary infarct.

Remarks by Dr. BEAVEN RAKE.—This case showed a temporary improvement after free incision of the elephantoid tissue, the circumference of the leg going down nearly three inches. In two months' time, however, it had increased to more than its original size. I then amputated at the patient's request. I cannot but regret that the flaps were not left open, for possibly, if the stump had healed by granulation, the fatal result might have been avoided. As, however, I was well above infiltrated tissue, it seemed safe to close the flaps in the ordinary way. Death was clearly due to septic absorption from the suppurating medulla.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Cases of Goitre.—Suppurative Peritonitis.

AN ordinary meeting of the Society was held on Jan. 21st, Dr. W. H. Dickinson, President, in the chair.

Mr. JAMES BERRY read a paper on Diseases of the Thyroid Gland, illustrating it by a series of thirty-four specimens, forty photographs, and sixteen casts, which had been collected by him in the course of the last five years. Some of the specimens had been removed by operation during life; most of them, however, were from the post-mortem room. Two specimens showed the usual condition of the thyroid gland in myxœdema; the organ in each case was greatly atrophied, and quite devoid of glandular tissue. A specimen of senile atrophy contrasted with the preceding; although much diminished in size, it still contained much well-formed gland tissue. Several photographs of different varieties of cretinism were shown; some of the patients had goitres, others had not. The majority of the specimens showed the structure of the different varieties of goitre. In the early stage of the disease there was usually general hypertrophy of the whole gland, attended with an increased amount of colloid secretion in the thyroid vesicles; to such goitres the term "parenchymatous" was usually applied. The specimens showed various stages between this condition and those in which one or more large cysts were present, or in which there was considerable increase in the connective tissue of the gland. Fibrous goitre was stated to be probably much less common than was often supposed. Many cases diagnosed as such during life subsequently proved to be of a different nature. A specimen of goitre from a case of Graves's disease was shown, and attention was drawn to the small size of the thyroid arteries. Other facts also showed that the gland in this disease was not nearly so vascular as was often supposed. Several specimens showed distinctly encapsulated tumours, cystic or solid, embedded in the substance of the thyroid gland. True simple hypertrophy always involved the whole gland, and never caused any great enlargement of it. Nearly all unilateral goitres and goitres of very large size were composed either of cysts or of more or less definitely circumscribed solid tumours of the gland. Examples were shown of goitres occupying unusual situations, such as near the angle of the jaw. In one specimen a process of gland extended transversely across the neck at the level of the hyoid bone. In one-third of the specimens the existence of a "pyramid," or process, extending upwards in front of the larynx, was demonstrated. The obstruction which an enlarged pyramid would necessarily cause in a tracheotomy or laryngotomy was pointed out. The alterations produced by goitre in the position and shape of the trachea were next discussed. All uniform enlargements of the gland caused lateral flattening of the trachea. A specimen was exhibited in which death had occurred from dyspnœa caused in this manner, and reference was made to numerous other cases of similar nature. Unilateral goitres and bilateral goitres, in which the two lobes were of different sizes, caused bending, twisting, lateral, and oblique flattening, according to the shape of the goitre. Specimens and casts of the interior of tracheas deformed by goitre were shown to illustrate these points. Antero-posterior flattening of the trachea was shown to be very rare, and goitres lying immediately in front of the trachea, and not involving much of the lateral lobes, were shown to be rarely the cause of dyspnœa. The apparent softening and atrophy of the trachea which had been described was alluded to. Pressure of the goitre upon the œsophagus, recurrent laryngeal nerves, and sympathetic nerves was shown by some of the specimens and photographs. Three photographs showed various stages of cachexia strumipriva produced by the total extirpation of goitre, and others illustrated the conditions after partial extirpation: the latter showed the advantage of leaving a portion of the gland behind sufficiently large to carry on its functions. Eight of the specimens exhibited had been removed by operation, three by the author and five by other surgeons; in most cases the operation had been performed on account of dyspnœa.—Mr. HORSLEY drew attention to a paper recently published by Dr. Eiselsberg, one of Professor Billroth's assistants, which completed the experimental side of the inquiry into the functions of the thyroid. Munk of Berlin had attributed all the effects of extirpation of the thyroid to injuries of the nerves of the neck at the time of removal of the gland, but Dr. Eiselsberg's experiments showed that this was not the case, and every other investigator had contested Munk's position. If the gland had a definite function, the remainder left after removal would hypertrophy in a compensatory fashion. Schiff had tried to transplant the thyroid into the abdomen, and his results were partly successful; but Eiselsberg transplanted the whole thyroid gland into the abdominal wall: where the transplantation was successful the animals lived; where it failed they died. With regard to the dyspnœa seen in goitre, it was the most characteristic symptom in animals after removal of the gland, and artificial respiration relieved the condition. As to the so-called cachexia strumipriva, he advised, in order to avoid it in cases where it was necessary to extirpate the whole gland, that a large monkey's thyroid should be transplanted, and owing to the late development of the cachexia there would be a good margin of time for it to hypertrophy in accordance with the wants of the subject. He thought it would be justifiable to carry out a similar measure in myxœdema and cretinism.—Sir JOSEPH FAYRER had travelled in the Terai district of India, which was low, damp, and malarious, where goitre was common, together with profound anæmia. In some cases where enlargement of the spleen was found, there was no increase in the thyroid, and *vice versâ*. In 1850–1855 two cavalry officers stationed in Terai discovered that by the external application of biniodide of mercury the goitres were removed or much diminished. They treated between three and four hundred cases a day, and made only two or three applications in each case, the patient in the intervals being fully exposed to the sun. One drachm of biniodide of mercury was mixed with a pound of lard. Nearly all the goitres got

well under this treatment except the hard and cystic ones. He himself tried it afterwards in Calcutta, but, though it gave much relief, he did not get so many cures.—Dr. ANGEL MONEY asked if any observations had been made on the slight goitrous enlargements often found in chlorotic, anæmic girls. He thought that the application of cold compresses to the thyroid in chlorosis tended to improve the condition. Tetany was not rarely seen in chlorosis.—Dr. HALE WHITE had some time ago tried to carry out a systematic examination of thyroid glands from the post-mortem room, and in forty consecutive cases he discovered many changes unassociated with obvious clinical conditions. He asked what change was produced in elderly people by atrophy of the thyroid. In health it varied much in shape and size, and in microscopical structure the vesicles also differed widely, the contained material being sometimes colloid and sometimes granular, sometimes arranged in concentric rings, at others containing crystals of oxalate of lime.—Mr. WARRINGTON HAWARD said that he had often seen in parenchymatous enlargement a varying but considerable degree of pulsation. In one case secondary growths formed in various parts of the body, and these also were pulsatile.—Dr. DELÉPINE said that Schiff had observed, in dogs from whom the thyroid had been removed, bodies in the submaxillary regions like embryonic thyroids, and containing colloid matter. These might be hypertrophied portions of thyroid left behind at the operation.—Sir JOSEPH FAYRER remembered in a case of vascular goitre tying the two thyroid arteries, but the tumour remained as large as ever.—Mr. GILBERT BARLING gave details of the case of a middle-aged lady who had a right-sided enlargement of the thyroid, which rapidly increased in size. Three separate collections of pus were evacuated, and he regarded it as an instance of suppuration occurring in thyroid cysts. The nutrition of the thyroid was easily disturbed by division, excision of one lobe, irritation of the skin over it, inflammatory action in its neighbourhood, or even simply disturbing its position during operation on a neighbouring part.—Mr. SOLLY mentioned the case of a boy nine years of age in whom there was extensive lardaceous disease, and the material in the thyroid vesicles gave a marked amyloid reaction.—Dr. HALE WHITE and Dr. HADDEN had also seen lardaceous degeneration of enlarged thyroids.—Dr. HADDEN added that in myxœdema the thyroid was usually atrophied, and in sporadic cretinism it was absent; but what was its condition in goitrous cretins? Was it a replacement of gland by fibrous tissue?—Dr. PERRY said that there were two lardaceous thyroids in Guy's museum, one large and one small, and there were three cases of miliary tubercle.—Mr. BERRY, in reply, thought that transplantation might be good in cachexia strumipriva, but doubted its efficacy for cretins and in myxœdema. He had been unable to establish any direct connexion between the spleen and the thyroid, but after the removal of the spleen the thyroid slightly enlarged. In the Roman Campagna malaria was found without goitre, and the same occurred in this country. The biniodide treatment had not been very successful in England; he did not think that large cystic goitres could be cured by that method. In the few exophthalmic goitres he had examined he had found absence of colloid material; he believed that there was a close connexion between anæmia and chlorosis on the one hand, and exophthalmic goitre on the other. Dr. Money's observation concerning tetany was interesting, for it was frequently seen after removing the thyroid. He had found that fat persons dying of pulmonary trouble had small red thyroids without colloid, while in emaciated persons a large thyroid full of colloid had been found; many of these latter suffered from cancer, and he did not know how far that affected the result. Thyroid tumours, as a rule, were not a mere mass of vessels, though they were fed by large vessels. Most cases of thyroid suppuration occurred after typhoid fever or operation. In considering the case of goitrous cretins, it should be remembered that loss of function of the gland need not be associated with complete atrophy of it.

Dr. SAMUEL WEST gave details of a case of Thrombosis of the Portal Vein, the result of suppurative peritonitis in the course of gastric ulcer. The patient, a young woman aged twenty-two, who had had gastric ulcer for some years, was seized suddenly one day with severe pain in the left side. She gradually got worse, and on admission a week later was thought to have peritonitis due to the old gastric ulcer. She never had marked abdominal symptoms, and after a few days seemed to develop an empyema, a diagnosis which was confirmed, it was thought, when she began to expectorate pus. The left side was explored, and on one occasion a few drachms of pus obtained, but on the other none could be found. The diagnosis was made of the pyæmic state, with pus somewhere, but its position was doubtful. Nothing which could throw any light upon the diagnosis turned up in the course of the case, and the patient died of exhaustion. The post-mortem showed suppurative peritonitis and an old gastric ulcer, which, however, was so deeply embedded in fibrous tissue that it seemed unlikely that any recent communication could have existed with the peritoneum. The left pleura was free from pus, but there was a profuse broncho-blennorrhœa of the left side only, which accounted for the pus in the sputum. The portal vein was completely filled with an old, decolourised, adherent clot, and contained no blood; while the branches in the liver were so completely filled with pus that on section they looked like abscesses. Dr. West drew attention to the deceptive nature of the symptoms, which gave no evidence of the peritonitis, while the expectoration of so much pus was strongly suggestive of empyema. There was no ascites and no hepatic symptom of any kind. The chief interest was connected with the liver; it was extraordinary that there were no signs of portal obstruction, for that must have been complete, as no blood whatever was present in the vessel. Such cases as these were not mentioned at all by recent authorities on the liver, and he did not know of any other case of the kind recorded except a somewhat analogous one published by himself in the thirty-seventh volume of the Transactions. That case differed in this respect that the pus was there in the branches of the hepatic and not the portal vein, but the vessel also was quite devoid of blood, being filled with ordinary creamy pus.—Mr. STANLEY BOYD had made two autopsies on young children in whom suppurative phlebitis of the portal vein was found, and outside the veins there was a marked infiltration of small round cells.—Mr. HORSLEY asked if it were not possible that the pulmonary condition was due also to thrombosis.—Mr. GODLEE inquired why the case was not one of ordinary pylephlebitis. He alluded to a case of gastric ulcer in which a sub-diaphragmatic abscess formed. He asked if rigors were present.—Sir JOSEPH FAYRER had met with many cases with a history similar to that related by Dr. West.—Dr. SHARKEY had recently examined a case of pylephlebitis, and he was able to trace the affected vein down to the rectum, but could find no cause for it. Acute peritonitis was present, which seemed to have spread from this vein. In another similar case there was inflammation about the cæcum.—Dr. WEST, in reply to the President, said the material was proved microscopically to be pus. The original vein plugged was probably the splenic, from the gastric ulcer. There were rigors on two occasions late in the case. In this, as in Dr. Woolridge's cases, in spite of the portal thrombosis, there was no ascites.

The following card specimen was shown:—Mr. BIDWELL: Polypus from the Trachea of a Dog.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

AT the annual meeting of the Birmingham and Midland Branch of the Society of Medical Officers of Health, held at the Council House, Birmingham, Mr. HENRY MAY, President for the ensuing year, read a paper on the Isolation of Infectious Disease in Hospitals. He pointed out that since 1882, the date of the publication of Dr. Thorne's elaborate report on the Use and Influence of Hospitals for Infectious Diseases, the practice of isolation had been largely adopted, though there were few hospitals which could be called suitable or efficient. A large number of such hospitals had been erected, and the public had learned to appreciate their utility. A sanitary authority which had not made any provision for isolating cases of dangerous infection was now regarded as guilty of gross neglect of public duty; while the provision of a well-appointed hospital at the public cost, was rightly regarded as the most important of the sanitary measures to prevent the spread of infection, and as one link in an important chain of preventive measures. It was desirable to recognise the part which isolation had played in preventing the spread of small-pox, the most virulent infectious disease of modern times. By means of the operation of the compulsory vaccination laws and the prompt isolation of first cases, this disease had been practically banished from Birmingham, where

during the quarter which ended Michaelmas, 1889, although there were 3282 deaths from zymotic diseases, there was not one from small-pox; and in due time, by proper measures, they might fairly hope to stamp it out altogether. Then, in the case of typhus and relapsing fever, isolation had also contributed largely in eradicating them from places where they had formerly been endemic; and even scarlet fever, regarded until recent years as an unmanageable disease, had been greatly limited in its power by isolation, although, owing to the diffusibility and the intensity of its infection, the isolation afforded by hospitals could not alone be considered effectual. Typhoid fever, diphtheria, and membranous croup were infectious diseases in which isolation could not take so prominent a part in preventing as in those he had mentioned, inasmuch as other causes produced them, besides infection from person to person. If these cases were not treated at home, they might be safely and wisely treated in cottage or ordinary hospitals, and he did not think it was the obvious duty of sanitary authorities to make special provision for their isolation and treatment at the public cost. Dr. May urged the desirability of probationary wards and nurses being provided to receive the doubtful cases which were frequently sent in, and advocated a graduated charge for the patients in such hospitals, similar to that adopted at Aston, where the guardians had made payment for the destitute.—Dr. HOLLINGSHEAD said he should like to go much further than the President. He should like to see a hospital for the isolation of measles and diphtheria, many epidemics of which might be prevented by the isolatiou of the first cases, and he was opposed to exacting a payment for patients in public hospitals.—Dr. BOSTOCK HILL agreed that an infectious hospital did not exist for the benefit of the individual, but for the public benefit, and it should be paid for by the public.—Dr. ALFRED HILL thought that, where no hospital existed, hospital treatment at home was exceedingly desirable, and that medical officers should be made aware of any infection, so as to enable them to take hospital precautions where it was found. He thought the mere notification of such dangerous diseases would in due time be sufficient to rouse authorities, and cause them to provide suitable means of isolation. With respect to payment he disagreed with the President. In Birmingham it had been tried and was found not to work. Instead of 400 or 500 patients in the city hospital, if fees were charged they would not have more than 40 or 50. Then if they took people away from their homes it was for the benefit of the community at large, and therefore for the general public no charge should be made.

MIDLAND MEDICAL SOCIETY.

AN ordinary meeting of this Society was held on Dec. 4th, 1889, the President, Mr. Lawson Tait, F.R.C.S., in the chair.

Monocular Ophthalmoplegia.—Dr. SUCKLING showed a man, aged fifty-one, who was suffering from complete paralysis of all the muscles, internal and external, of the left eye. There were ptosis and complete immobility of the eye; the pupil was in a position midway between extreme dilatation and contraction, and did not react to light or accommodation. The patient could see well with that eye; there was no optic neuritis or other change in the fundus, and no protrusion of the globe. There was slight anæsthesia in the distribution of the supra-orbital and supra-trochlear branches of the ophthalmic nerve. The sense of smell was much diminished in the left nostril, and there was a little discharge on that side. Taste was also affected. Hearing was much impaired, but this had been the case for years. The patient's illness commenced last Christmas with shooting pains on the left side of the head in front of the ear. Six months ago a small lump appeared on the left side of the neck immediately behind the vertical ramus of the jaw. This lump has immensely increased in size, there being now a large nodulated mass in the left parotid and submaxillary regions. He had difficulty in mastication, and could not open his mouth very much on account of the mass behind the lower jaw. The facial nerve was unaffected, as was also the right eye. The nerves paralysed were the third, fourth, ophthalmic division of the fifth, and sixth of the left side. Dr. Suckling was of opinion that the growth had commenced in the spheno-maxillary fossa, and had damaged the ocular nerves as they pass through the sphenoidal fissure, the growth then spreading through the spheno-maxillary fissure to the surface. The absence of optic neuritis, vomiting, and headache showed that the growth was not intracranial, but extra-cranial. The patient was cachectic and rapidly emaciating, there being little doubt that the growth was malignant. There were no trophic changes in the left eye, but this might be accounted for by the protection afforded the eye by the dropped eyelid.

Necrosis of Lower Jaw.—Mr. WILLIAM THOMAS exhibited a patient who had suffered from necrosis of the lower jaw, probably after injury. The left half, including the ramus, condyle, and the alveolar process, containing many teeth, had been easily removed entire. In such cases he was strongly in favour of leaving the sequestrum until quite loose before attempting to remove it, and to keep the mouth as pure as possible by means of antiseptic lotions.

Nævus Treated by Collodion.—Mr. THOMAS showed three cases of nævi treated by the application of collodion—one in the back, another in the parotid region, and a third in a young infant over the anterior fontanelle. Collodion was painted over them and the surrounding skin, the application being usually carried out by the mother. In all considerable improvement had resulted, rendering further treatment by operation unnecessary. He pointed out the absolute freedom from risk or danger, and the advantages it offered in some situations where almost all methods were unsafe.

Abortion.—Dr. PURSLOW exhibited specimens from two cases of abortion. In one, the embryo with membranes came away at about the fifth week, apparently as a result of mental excitement caused by a quarrel. The patient, aged thirty-two, had seven children and no previous miscarriage. She did not sustain any injury in the quarrel, but she began to lose blood at once, and after a month was taken with pains, and the embryo was expelled with its membranes intact. Its length was half an inch. In the other case abortion occurred at the fourteenth week, and the placenta showed hæmorrhages into its substance. The patient, aged twenty-six, had one child, and no previous miscarriage. She had well-marked primary and secondary symptoms of syphilis before the birth of her first child, which was mature and well grown, but showed marked signs of inherited syphilis. Dr. Purslow drew attention to the fact that the woman, who had well-marked syphilis, should give birth to a child at full term, and later on, though no fresh manifestations occurred in the meantime, should abort at an early stage.

Dr. CARTER showed a case of Chronic Spasmodic Paralysis.

Mr. JORDAN LLOYD read a paper on Intestinal Obstruction, and its Treatment by Abdominal Section.

Reviews and Notices of Books.

The Lord of Humanity, or the Testimony of Human Consciousness. By FREDERICK JAMES GANT, F.R.C.S. London: Hatchards. 1889.

MR. GANT is one of the representatives of this medical day and generation who has never been properly understood. He has added largely to the practical art of surgery, to the study of which no man was ever more conscientiously devoted, and his large work on surgery is certainly popular in medicine, finding its way into medical libraries throughout the English speaking communities with an ease and appreciation indisputable. And yet Mr. Gant is not one who has won his way to those envied places in the profession towards which so many strain, as though the *summum bonum* of existence lay there and in no other successes. Perchance the secret of this apparent neglect of honest work rests largely on the very honesty of the worker, on the pureness and simplicity of his life, and on the independence of character which has ever crowned it.

We must not feel, in saying this, that Mr. Gant is wanting in ambition. On the contrary, he is an ambitious man, but his aspirations are, unconsciously to himself perhaps, of a kind far away from the noble or ignoble strife which distinguishes an aspirant covered with scars or open wounds rather than with honours more simply won;

for in the very book now before us he exposes an ambition to excel which is quite unique in intention, design, and detail. If this book, entitled the "Lord of Humanity," had come from the hand of some learned divine it might have attracted instant attention, have raised a perfect cloud of controversy, and easily have led to the formation of a new sect of philosophic religionists, whom even Agnostics would respect, and yielding a name of which its author might honestly be proud. Strange, then, that a practising surgeon should bring forth such a study and make all who read him, with a true desire to be just, conscious that a little volume of remarkable character is under perusal.

Whatever comes from one of the brethren of medicine is of some interest to all the fraternity, and we, therefore, are bound to treat on this new addition to our literature as we would on any other essay from the pen of a medical scholar. It is a book of seven chapters and an introduction. In the introduction we are treated with an exposition of human character in three typical conceptions of religion and theology. The first chapter, following upon the introduction, is on "Man as an Evolutionary Being with ever-varying Individual Differences." The second chapter is on "The Conception of God arising in Human Consciousness." The third is on "The Revelation of Christ." The fourth is entitled "Ye in Me and I in You; I in Them and Thou in Me." The fifth is on "The Triune God, 'the Father' in Christ 'Incarnate,' and in 'His Spirit.'" The sixth is on "Issues of the Conflict between Good and Evil in Man." And the seventh and last is on "Death of Man—Moral Law in Disease, and consequent Death."

We have set forth the outline of the whole of the work in these few lines, and our readers who are fascinated with such absorbing topics will know now something of the matter which Mr. Gant puts before them. They are topics on which any theologian of any school might descant, from Thomas a' Kempis to Mr. Spurgeon. Our author, as it turns out, is a follower of that broad and tender Christian church of which the late Rev. F. D. Maurice may be called the founder. He separates religion from theology. "Three types of human character—fear, commercial loss and gain, and pure trustful love—are the universal movements of the human heart in religion. There are only two forms of intellect in theology." The two forms of intellect in theology he sets forth are—(1) the barren form, which accepts a creed demanding the unconditional surrender of private judgment—"a dry faith," relieved only by an exciting sensuous materialism; and (2) the intellect, which reverses this order of logic, which sees "the *is* because it *ought* to be"; which implants trust in the heart of man, and which defies the power of evil, and even infinite sin, by the recognition of an infinite love. According to this leading, love is the dominant motive, the dominant power, the dominant action, the essence of the God infused into the mortal man; after which fear is banished as a human passion, and punishment is rendered impossible because incompatible with the new state; the life eternal begins with the life that is and is to be; and the living human body which belongs naturally to man's personality, the conscious I, being but an instrument or series of instruments—a mechanism—is cast off when a man dies physically, like any other animal, so that "he may be said to shed his body."

It is very curious to observe how a medical practitioner holding these abstruse views on one of the most solemn of subjects is able to back them up by reference to the hard facts of every-day practical life of medical observation. When a leg is amputated from the body, the person still complains of pain in his or her toes, as if, indeed, the existence of the body were only a product or outcome of human consciousness. A stronger argument for the theory of continued existence no divine ever offered to the world. It is beyond ingenious, even though it be fallacious.

Possibly some reader will cry *cui bono?* Why puzzle the poor brain with such unpractical learning as this? Why not, if we are to be troubled in spirit with these arguments, why not go back to the teaching of the still living physician of English blood whom Emmerson placed at the very head of English thinkers on these subjects and speak of "the human body and its connexion with man"? But it is not all so unpractical as at first sight it seems to be, and the reader who will, for the moment, accept Mr. Gant's arguments for the sake of testing them, will discover many real and practical issues. For example, if we place the personality of man apart from his animality, and let the body stand as the property of the conscious personality, which, being the only conscious thing or essence, is the sole responsible agency for right and for wrong, then the whole field of disease, as manifested in the taints and accidents constituting physical disease of body, are, simply and purely, wrongs done to the property of the person, either by himself, by his parents, or by others to whom his bodily property has been subject. Thus, "in the life history of man's bodily organism the natural connexion of his personality is strained by his violations of moral law, which, operating through physical agencies in the forms of disease and injury, terminate in the disunion known as physical death." And this again opens another question—namely, whether man in a perfectly natural state of being would have voluntary control over the physical life of his own body, "retaining it or severing it simply by the power of his own will?"

A critic inclined to be very critical would be led to strike out comparisons between this book of Mr. Gant and some others similar of notable fame. The Teutonic philosopher, Jacob Boehme, might be ransacked; Swedenborg might be revisited; Garth Wilkinson, to whom we have already referred, might be brought to the front; nay, the recent re-editions of the Buddhist Theosophies might be marshaled forth, all of them as in some degree correlative with our author. We will not venture on so wide a field. We are satisfied that Mr. Gant has been to none of these sources for his inspiration. Whatever he has placed before us is his own thought and belief, a combined result of physiological learning and earnest, thoughtful, religious fervour. We agree with him that fear and cupidity are the two ruling vices of our age, as they have been of all ages. We agree with him that "love extending beyond the narrow confines of serfdom," love one for another, and for all goodness, is the grand corrective of human misery and sin; and, much as we may differ from him, we commend his motives, as we do his book, to the favour of our readers. His pages will yield for a few hours' study currents of purest thoughts on the greatest of all subjects relating to human life and action, and even where they fail to carry conviction will often call forth sincerest admiration.

OUR LIBRARY TABLE.

The Various Manifestations of the Rheumatic State, as exemplified in Childhood and Early Life. By W. B. CHEADLE, M.D. London: Smith, Elder, & Co. 1889.—Dr. Cheadle has done well to reprint in book form his interesting Harveian lectures, which appeared in our columns last year. Their special value lies in the clearness with which he demonstrates that arthritis is by no means a leading feature of rheumatism in the child, and his comparison of the rheumatic phenomena in the child and in the adult. His discussion, too, of the relationship between chorea and rheumatism, and the important significance of the "rheumatic nodules," form valuable contributions to

the subject. The wide importance of the question is illustrated by the arguments advanced in support of a rheumatic origin of the endocarditis of chorea, and still more by the view that mitral stenosis, for which so often an antecedent history of rheumatism is wanting, may have arisen in an unnoticed attack of that disease in childhood. It is certainly remarkable how rare, comparatively speaking, it is to find this lesion in the young child, when one regards its frequency as an isolated lesion in the young adult, and especially in the female. Moreover, the morbid process which eventuates in typical mitral stenosis is one that involves rather the deeper tissues of the valve, a slowly progressive fibrotic change, wholly different from vegetative endocarditis; but, as Dr. Cheadle shows, it is just this kind of subendothelial change that has been observed in association with cases marked by the singular subcutaneous nodules. The work is evidently based upon the author's clinical and pathological experience, and is written in a lucid style.

Beiträge zur Pathologischen Anatomie und zur Allgemeinen Pathologie. Redigirt von Dr. E. ZIEGLER. Band V., Hft. 2 und 3. Band VI., Hft. 1 und 2.—The contributors to the second part of the fifth volume of this high-class periodical are engaged in work at the Pathological Institute at Turin. Their papers are as follows:—On Adenomatous Tissue in the Small Intestine, by Dr. Tito Carbone; Contributions to the Histology and Physio-pathology of the Mammalian Spleen, by Drs. P. Foá and T. Carbone; on the Study of the Structure of the Mammalian Red Blood-corpuscle, by Dr. P. Foá; on the Repair of Aseptic Wounds of the Heart, by Dr. Augusto Bonome; on Renal Infarcts (an experimental research), by Dr. P. Foá. The third part comprises papers from various institutes: on Hyaline Degeneration of the Conjunctiva, by Dr. A. Vossius (Königsberg); on a New Type of Malformation of the Human Trachea, by Prof. H. Chiari (Prague); on Inflammation, by Prof. E. Naumann (Königsberg); on the Pathological Anatomy of Intraocular Cysticercus, by F. Dolina (Königsberg); on the Development of Osteoma of the Arachnoidea Spinalis, by Luigi Zanda (Genoa); Experimental Contributions to the Pathological Anatomy of Inflammation of the Lungs, by W. H. Cox; on the Causes and Method of Immunity of the Human Organism from Infective Diseases, by E. Ziegler (Freiburg); Experimental Researches on the Proliferation and further Development of Leucocytes, by Fr. Reinke (Kiel); on the Minute Changes in Bronchitis and Bronchiectasis, by W. Fischer (Kiel); on the Relation of White Blood-corpuscles to Coagulation, by M. Löwit (Innsbruck); on Karyokinesis in the Wounded Retina, by Francesco Falchi, Professor of Ophthalmology at Pavia. The two parts of the sixth volume have the following contents: On the Effects of Extirpation of the Adrenals in Rabbits, by Dr. Guido Tizzoni of Bologna; and from the Munich Pathological Institute, Contribution to the Study of Chronic Oöphoritis, by Jul. Sparkhul; Contribution to the Pathological Anatomy of the Placenta, by Alfred Prinzing; on the Smooth White Contracted Kidney, by H. Held; Left-sided Fissure of the Nose associated with Defect of the Frontal Bone, by J. Kindler; on some Congenital Cystic Tumours of the Neck, by E. Frobenius.

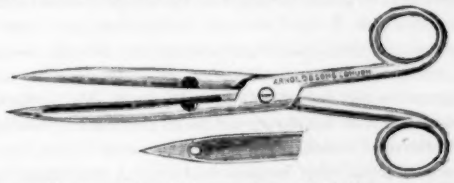
The Transactions of the Edinburgh Obstetrical Society. Vol. XIV. 1889.—This volume contains various contributions on Anatomy, by Drs. Barbour, Symington, and Hart, and on questions relating to the Third Stage of Labour, by Drs. Helme and Hart. Other papers are: a case of Rupture of the Uterus, by Dr. Charles Underhill; on the Relative Weights of the Placenta and Child, by Dr. Mackness, showing an absence of proportion in this respect; on Fœtal Malaria, by Dr. Felkin; on a Variety of Post-partum Shock, by Dr. Haig Ferguson; on Mitral Stenosis and Labour, by Dr. Hart; a case of Heart Disease complicating Labour, treated successfully by nitrite of amyl, by Dr. Fraser Wright; and Remarks on Injury to the Fœtal Neck through Pressure of the Umbilical Cord. On the whole, we think we have seen volumes of these Transactions of more interest and containing more work. A large proportion of the contents consists of more or less elaborate arguments based on one or a few cases. The most interesting paper is that of Dr. Felkin, tending to show that ague can be propagated to the fœtus in utero by the father without infecting the mother.

The Newspaper Readers' Index of Reference, compiled and published by H. AXON of Bolton, Lancashire, is calculated to be of great value, as an aid to memory, to almost all classes of the public, but especially to those engaged in any kind of literary work.

New Inventions.

NEW EXPANSION TROCAR.

I WISH to draw the attention of the profession to an instrument which I think will be found very useful in suitable cases. I have named it the New Expansion Trocar. (See illustration.) It is sharp-pointed like a trocar, with an opening near the point. The body of the instrument is hollow, and is introduced into a swelling with the blades closed. Should there be fluid or pus there, it will enter



the opening near the point, run down the hollow portion of the instrument, and come out at the opening near the hinge. In this way an abscess may be tapped or any fluid removed. If an extra opening is required, the blades may be divaricated, and thus cutting and loss of blood avoided. My best thanks are due to Messrs. Arnold and Sons for the way in which they have carried out my suggestions. They can supply it in different sizes.

R. E. J. DURDIN, L.K.Q.C.P.I., L.R.C.S.I.

Great Bedwin.

KNEE-SPLINT.

THIS splint consists mainly of lateral hinged steel supports with half circles of similar metal above and below the joint, the upper of which crosses the front of the thigh, while the lower receives the upper part of the leg posteriorly, the complete circle in each position being completed by straps, which, like the steel above and below, are well padded. Passing along the outer side of each lateral support are strong springs. On each side there are two of these united by a central chain. This works over a projection which acts as a pulley, so that after flexion the extension of the limb is aided by the action of these springs. The splint is adapted for use after injuries to the knee, more especially where weakness of the quadriceps extensor remains. The apparatus is registered, and is manufactured by Messrs. Lindsey and Sons, 32, Ludgate-hill; 40, Gracechurch-street, London; and Broad-street, Oxford.

NORFOLK AND NORWICH EYE INFIRMARY.—The annual meeting of the governors and subscribers of this institution was held on the 16th inst. The medical officer's report showed that 160 patients had been admitted as serious cases, and that the nursing arrangements had been of such a nature that in all the cases treated there was not one untoward result.

THE LANCET.

LONDON: SATURDAY, JANUARY 25, 1890.

THE meeting of Convocation on Tuesday last was in many respects a very singular one. A scheme for the reconstitution of the University has been formulated by the Senate and offered as a basis for a series of conferences with University and King's Colleges, the Royal Colleges of Physicians and Surgeons, and the Legal Corporations. This provisional scheme had been sent to the various members of the Annual Committee of Convocation, and was on Tuesday technically laid before Convocation in the minutes of the Senate, but the members of Convocation generally had no opportunity of learning its details. They were therefore placed in the anomalous position of having a scheme before them with which many of them actually, and all of them presumably, were unacquainted. Some resolutions dealing with the scheme were negatived as premature and inopportune, for obviously after the conferences have taken place the scheme may be so modified as to assume a very different aspect. But when Convocation learnt that it might have to accept or reject *en bloc* a new charter for the reconstitution of the University on the lines laid down in the report of the Royal Commissioners, and that if it refused to join the Senate in making an application for the new Charter the members would probably be unable to discuss and amend it in detail, the temper of the meeting towards both the provisional scheme and the report of the Royal Commission at once became evident. A resolution was carried that the scheme be circulated among the members of Convocation, and it was practically understood that, after an interval of four weeks, the Annual Committee and the Chairman of Convocation would summon a special meeting for its full discussion. The subsequent passing of the resolution—"that the proposal of the University for London Commission that, under a new Charter for this University, special powers and privileges should be conferred on certain institutions in or near London is incompatible with the fair and just treatment of the provincial colleges, and that the acceptance of this proposal would be detrimental alike to the interests of the provincial Colleges and to those of the University itself"—shows that Convocation will again (as it has previously done in the case of Sir EDWARD FRY'S scheme) prevent any real authority over the University of London being exercised by the teachers of the London Colleges and schools. But the Commissioners say it is not reasonable that country Colleges should have a power of veto upon the enlargement of the present University for teaching purposes, especially concerning the metropolis. And again the Commissioners urge that if the present University is to undertake the functions and duties of a teaching University for London, it appears to them to be indispensable that those teaching institutions which were to be associated with the University should be limited to London or its neighbourhood. Thus Convocation evidently desire nothing but an Imperial Examining Board. The Commissioners acknowledge the want of a local Teaching University, and ask the existing University to undertake the work; and the Senate, in a half-hearted and half-hesitating manner, have put forward a provisional scheme which only partly follows the recommendations of the Commissioners, and which the Teaching Colleges will probably refuse to accept. Under such circumstances, is not the formation of a second University—on the lines of the Scotch and German universities—the solution of the difficulty? It was further evident at the meeting that any suggestion for the establishment of a second-grade medical degree by the existing University, or any lowering of the present standard, would have the most strenuous opposition of nearly every graduate.

OF all dangers connected with the chief peril of a woman's life none is so urgent as post-partum hæmorrhage. The peculiar structure of the human placenta and its vascular connexion with the uterus constitute a danger which places the female of the human species apart from the females of the rest of the animal kingdom. These peculiarities consist essentially in the intimate fusion of the maternal with the fœtal part, forbidding the dissociation of the two vascular systems without great injury to the maternal part, and involving an extensive laceration of the maternal blood-vessels passing from the uterus to the placenta, and *vice versâ* (some of the latter being of the size of a cedar pencil), which leaves for a time the blood of the mother free to escape through openings which, if gaping for a very short time, might drain her body. This danger is, however, met by the enormous muscular thickness of the human womb, which closes these gaping orifices almost as soon as they are made, and, in a healthy condition, reduces the inevitable hæmorrhage to a very small amount. Some obstetricians have gone so far as to state that, in a typically healthy state, no blood would be lost; but this is contrary to careful observations, which show that on an average, and excluding post-partum hæmorrhage in the pathological sense, several ounces of blood escape; nor is it certain that this small loss does not subserve the useful purpose of preventing the overfilling of the bloodvessels which might ensue from the throwing of the uterine blood into the circulation. The peril of post-partum hæmorrhage is still further illustrated by comparing the thick, firm human uterus with the thin, gut-like uterus of the lower animals, and by imagining what would happen if a cow were to develop a human placenta. Such an event would almost certainly prove fatal to the cow. It may be readily granted that improved methods of managing the third stage of labour have diminished the dangers of post-partum hæmorrhage; but it is still, and must always remain, the most urgent peril of the parturient woman, and statistics of various countries show a tangible proportion of fatal cases, varying from 0·032 per cent. to 0·07 and 0·12 per cent. of all parturient women in Germany. The statistics of the Rotunda Hospital in Dublin give very similar figures. It is not our intention to give a review of all the methods of treatment now or formerly in vogue, but to call attention to what would appear to be a substantial addition to our resources in the case of atonic after-bleeding. This is described in *Volkmann's Sammlung Klinischer Vorträge*, No. 347, 1889, S. 2499, by Dr. DÜHRSSEN of Berlin.

We must here, parenthetically, express our deep regret

that we are not oftener able to refer to records of English research in midwifery. The cause is not far to seek, and it consists in the entire absence of State-endowed lying-in hospitals. Our obstetricians are admittedly second to none; in delicate points of management probably superior to any, but it is only by making it worth a good man's while to live in such an institution for some years (as is done in Dublin) that work of this kind can be largely produced. The difficulties of making accurate observations depend greatly on the uncertainty in respect of time.

To return to Dr. DÜHRSSEN'S paper. This sets forth a practically new treatment for atonic post-partum hæmorrhage, consisting in the tamponing or plugging of the cavity of the uterus. The first suggestion of such a treatment is claimed for France by Dr. AUVARD, since LEROUX of Dijon in 1776 recommended plugging the vagina with cloths steeped in vinegar, and on one occasion introduced two such strips into the uterus. On the other hand, it is contended that LEROUX'S object was to get the styptic influence of vinegar to act on the uterine wall rather than to exert pressure, and that the priority in this case belongs to WENDELSTÄDT of Wetzlar, who in 1806 plugged both uterus and vagina with strips of linen soaked in diluted sulphuric acid. He also laid stress on the plugging rather than mere styptic action, though it will be seen that he used a styptic. Later on balloons of indiarubber and the bladders of animals were used to plug the uterus, being distended with water. The use of styptics brought the treatment into discredit, from the sepsis produced by their destructive action on the uterine surface; it was also feared that distension of the uterus would increase rather than diminish the bleeding, and the treatment has been condemned even by SPIEGELBERG and SCHROEDER.

In 1887 Dr. DÜHRSSEN, on the strength of two successful cases, recommended firm plugging of the uterus and vagina in certain cases of atonic bleeding. He advised the undermentioned procedures, in the following order: — (1) Evacuation of the bladder, (2) ergotine injections, (3) friction of the uterus, (4) hot or ice-cold intra-uterine irrigation, (5) plugging of the uterus with iodoform gauze; and in 1889 published a series of seventy-nine cases (sixty-five of which are put in a table), with six deaths, one from sepsis. The perusal of these cases seems to show that tight plugging of the uterus and vagina, without any styptic, at once causes firm contraction and retraction, and stops hæmorrhage effectually. It is plain that where the bleeding comes also from a laceration, the treatment should only meet a double want, and this appears to be practically the case. The danger of sepsis is avoided by boiling the material for plugging during several minutes in a vessel with a lid, which preserves the boiling point in every part of the water. On an emergency any linen may be used torn into strips if treated in this way. The best material, however, is a long gauze bandage sterilised and soaked in 5 per cent. carbolic solution, or iodoform gauze; and in default of this, strips of linen sterilised as above, the vagina being packed with iodoform or salicylic wool. The plug is left *in situ* not longer than eight hours. Incidentally the author states that the introduction of the use of perchloride of iron into practice is regarded in England as on a par with vaccination as a life-saving discovery. Here he is distinctly misinformed, inasmuch as the injection of perchloride of iron is generally recognised as highly dangerous, and has been for some considerable time out of favour. In fact, the procedures which Dr. DÜHRSSEN recommends, and which are quoted above, have been for some time the routine English treatment, with the exception of course of the utero-vaginal plug and of the routine use of ergot. The following is the exact method of the introduction of the former. If the uterus does not contract under friction and ergotine injection, the patient is at once placed in the lithotomy position, the external genitals are thoroughly cleansed with soap and 3 per cent. carbolic solution, during which process any external injuries are easily seen, the catheter is passed, the vagina disinfected with at least one litre of 3 per cent. carbolic solution, and the uterus is then irrigated with the same, or, if the patient is very anæmic, with a solution of salicylic acid (3 per 1000) or with simple boiled water. If bleeding continues, the uterus is explored with two fingers to make sure that nothing is left behind. The cervix is then seized with one or two volsellæ and drawn down to the vulva; or the plugging may be done through a duck-bill speculum, or even under cover of two fingers of the left hand used as a duck-bill speculum. The end of the gauze bandage is then seized with a long speculum forceps, the left hand grasps the fundus uteri, and the end of the bandage is carried up to the fundus; the bandage is then packed into the uterus bit by bit. The vagina is next packed in a similar manner, or, if there is cervical bleeding, with tampons of cotton-wool. Care must be taken that the packing material is not defiled on its passage into the uterus, for in the only fatal case from sepsis the gauze bandage had been allowed to trail on the floor. This, however, was not in Dr. DÜHRSSEN'S practice. In severe cases he adopts plugging in the first instance as the safest means. In only one case was hæmorrhage immediately fatal, four other cases died of anæmia after arrest of the bleeding, one of these of œdema of the lungs which was present before the uterus was plugged. The other case was that of sepsis mentioned above, in which the gauze had been allowed to trail on the floor. The author includes another as a fatal case, in which the patient died of tuberculosis of the lungs two months after confinement. This, however, seems an exuberance of honesty, and we do not think that this death ought to be counted. The author also recommends plugging the uterus in cases of hæmorrhage after Cæsarean section and of rupture of the uterus. This method has proved successful in his hands, as well as those of LEOPOLD and others.

The table accompanying the paper includes many cases of severe hæmorrhage. While it is difficult to estimate the gravity of each case from a description, it would seem that in plugging the uterus and vagina we have a valuable addition to our resources in the treatment of post-partum hæmorrhage, and one that is not prone to substitute one great peril for another; indeed, it is easy to understand that, when properly performed, sepsis is rather avoided than encouraged, the gauze acting as an efficient drain.

THE literature connected with the subject of Sleep is very curious and interesting. Many are the "saws" passed from mouth to mouth on the subject, many are the superstitions

that have grown up around it. Tales of extraordinary capacity either for sleeping or for dispensing with sleep excite a ready interest, even if they do not always inspire belief; and the public reads with avidity the records of the peculiarities of great and famous personages regarding a matter in which all participate, and about which everyone has something peculiar to relate. Among great sleepers the famous Dutchman, RIP VAN WINKLE, was *facile princeps*, but the touching legend of which he is the central figure has only an indirect relation to sleep, its real significance being rather the havoc wrought by time and the dissolution of sympathy which years of separation bring about—a point touched with all his usual delicacy by TENNYSON when he suggests that if the dead should rise they would receive but "an iron welcome" from those who had survived them. If a sleep of years be mythical, many cases are on record where unusual powers of sleep seemed to conduce to intellectual vigour. MONTAIGNE, Sir WALTER SCOTT, Archbishop WHATELY, ROBERT SOUTHEY, and JAMES WATT are a few of the many great men who practised and enjoyed an indulgence in sleep beyond what is commonly reckoned a fair allowance. Yet there seems some truth in the popular impression that men of extraordinary mental activity are, as a rule, light sleepers. JOHN HUNTER slept four hours out of the twenty-four, and JEREMY TAYLOR cut his allowance down to the remarkable minimum of three. Dr. JOHNSON suffered from much wakefulness, and CARLYLE has made his sleepless nights for ever famous by the marvellous vividness which he has thrown into his description of their tortures.

What the just and right allowance of sleep may be for the individual does not seem to depend altogether upon the amount of mental or physical work done, and is, to a considerable extent, determined by inheritance and idiosyncrasy. The idler and the pleasure-lover often seem to sleep longer and more easily than the laborious brain-worker, and cases may be traced where a tendency to light or heavy sleep has run strongly in families, irrespectively of the occupations or of the physical and intellectual activities of individuals. The only safe guide in determining such a question is experience. If good health and full intellectual efficiency can be preserved by six hours' sleep, there seems no motive for making efforts, probably destined to failure, to secure eight hours. But care should be exercised that short sleep has not been the result merely of a long-continued bad habit, and that every opportunity is afforded to the organism to procure that amount of sleep that seems normal for it. Hence, moderately early hours, quiet, freedom from sources of disturbance are necessary, and for a prolonged period, before we can feel sure that the amount of sleep that seems natural to us is really so. Eight hours has been fixed by general consent as the happy mean, and we have no objection to make to it, although it is perhaps a liberal allowance for adults in vigorous health. The young and the ailing may with advantage take more, and, indeed, can hardly have too much of so excellent a tonic and restorative as sleep.

The treatment of insomnia is a large question, into which it would not be possible to enter fully in the course of a single article. Here in a very special degree must be borne in mind the cardinal rule of all rational therapeutics—viz., strive to remove or modify the cause. Insomnia is not a disease, but a symptom, and should only exceptionally be treated apart from the condition which gives rise to it. Unhappily, the causes of insomnia are often moral and emotional, and hence only slightly amenable to therapeutic measures. Medical art cannot

> "Minister to a mind diseased:
> Pluck from the memory a rooted sorrow;
> Raze out the written troubles of the brain
> And, with some sweet oblivious antidote,
> Cleanse the stuff'd bosom of that perilous stuff
> Which weighs upon the heart."

"Therein," says the poet and sage, "the patient must minister to himself."

Apart, however, from such causes of insomnia as profound sorrow or harrowing anxiety, rational treatment can do much. The conditions of bed and bedroom should be inquired into and modified as common-sense rules may dictate. The occupations of the sufferer, both during the day, and more especially during the hour preceding bedtime, should be carefully inquired into. Most authorities, wisely no doubt, recommend that the bad sleeper should break off his daily routine some time before the hour for retiring to rest, that he should try the distracting influence of conversation, a stroll, a novel, or a cigar, and that every effort should be made to prevent the overtaxed brain from pursuing during the night the well-beaten track of the day. A tepid bath at bedtime often acts well, whereas a very hot or cold bath is to many persons injurious. The bedclothes should combine comfortable warmth with lightness and ventilation, and the head should be placed somewhat high. There is a widespread impression that it is easier to sleep with the head to the north than in any other position, but it is difficult to see any valid ground for this idea. The various plans that have been devised of striving to cheat the mind into forgetfulness of self, such as counting numbers, picturing flowing water, reckoning up an imaginary flock of sheep, do not in general seem to be very successful. We must bear in mind, above all things, that sleep is exceedingly automatic, and that if we strive to make it purposive we defeat ourselves. The use of narcotics cannot be advantageously defined in general terms, but there can be little doubt that vast injury is daily wrought by the unwise use of chloral, bromides, and opium, whereas their careful employment, especially in severe disease and in acute insomnia, may be productive of immense benefit.

NOTHING daunted by two unsuccessful attempts, Dr. MURRAY LINDSAY has returned to the battle over the recognition of Scottish and Irish qualifications as equal in value to English ones. He proposed that henceforth in the Derbyshire General Infirmary—

"(1) Every candidate for the office of physician shall be a graduate in medicine of any University in the United Kingdom, or a Fellow, Member, or Licentiate of one of the Colleges of Physicians in the United Kingdom. (2) Every candidate for the office of surgeon shall be a graduate in surgery of any University in the United Kingdom, or a Fellow, Member, or Licentiate of one of the Colleges of Surgeons of the United Kingdom. (3) Every physician and surgeon shall be registered under the Medical Act in both medicine and surgery."

In supporting this resolution he said that asylums were well known to be model institutions, and that out of sixty-

eight borough and county asylums thirty-eight medical officers held Scotch and Irish qualifications. He did not press his motion to a division, but wisely accepted the following amendment:—

"That this Board is of opinion that before any alteration in the rules is agreed on the whole subject of the propriety of altering the rules be referred to the present Weekly Board, and that for this purpose the present medical staff and Dr. Murray Lindsay be requested to act with them."

We think this is a very reasonable conclusion to have reached, and we shall look with interest for a judicial and impartial report from the Board, fortified by the medical staff and Dr. MURRAY LINDSAY. The questions referred to them are complicated and various. They not only affect the equivalence of corresponding qualifications in England, Ireland, and Scotland, but the sufficiency of the ordinary qualifications as guarantees of competence for hospital appointments. We are entirely favourable to the abolition of all territorial distinctions of qualification for hospital appointments; but we maintain that the time is so comparatively recent when the higher qualifications in the Scottish *colleges*—not universities—could be practically bought, and that we are so ignorant yet of the present standards of examination for these qualifications, that it is reasonable to inquire before re-enacting laws. Dr. LINDSAY would accept the lowest qualifications in candidates for hospital appointments. This is a very serious question. The hospital surgeon is expected to discharge duties and to perform operations beyond those to be reasonably expected of men in general practice. The hospital physician is expected to bring a higher education and cultivation to the investigation of hospital cases. The ordinary qualifications are guarantees of competence to practise, not to discharge hospital duties. It is a fine question whether the governors of hospitals should not mistrust their own judgment in such cases, and demand from men applying for large hospital appointments some proof from universities or colleges of higher professional attainment. The argument from the asylums is not convincing. It is not believed that the medical treatment of insanity has been advanced so much by the medical superintendents of these institutions as the treatment of medical and surgical cases has been advanced by hospital physicians and surgeons, who for the most part have been graduates of universities or fellows of colleges. But we rejoice that this question has been referred to a board to be "threshed out.' It is not fitted for public meetings.

Annotations.

"Ne quid nimis."

DANGERS OF CHLOROFORM.

IN our annotation on the report of the first Hyderabad Chloroform Commission in our issue of March 2nd, 1889, we strongly deprecated anything like slipshod carelessness in the administration of chloroform, or anything likely to lead to such carelessness. Nothing, we are certain, could have been farther from the minds of either of the Commissions than to inculcate carelessness, and a careful perusal of the practical conclusions which we printed last week will show how necessary the Commissions consider care to be, and how stringently they inculcate it. Yet one of our contemporaries, in referring to the report of the Commission, says: "Henceforward chloroform is as safe as a glass of whisky-and-water. That is the net result of the Hyderabad Chloroform Commission." This may be true of chloroform carefully administered, but the least carelessness or inattention may lead to the most serious results, as was well shown by the cases of accidental death from chloroform amongst the animals used by the Commission. We think the instance is worthy of particular note in which the chloroformist was present in body but absent in mind, and allowed his attention to wander from the respiration of the animal to the performance of the operation. Instead of being an immense relief to every practitioner who has to administer chloroform, the conclusions of the Hyderabad Commission will have precisely the opposite effect. For if a death occurs during the administration of chloroform at present, the administrator may satisfy himself that such death was due to the effect of chloroform on the heart, and was unavoidable. But if the conclusions of the Hyderabad Commission are correct, this will no longer be possible, for their deliberate conclusion is that deaths from chloroform are preventable, and that their occurrence in the future will indicate carelessness in the chloroformist. It would be monstrous to make such a conclusion retrospective, and to say that all deaths that have already occurred were due to carelessness, because imperfect knowledge leads to a similar result, and it is only when the exact dangers and mode of obviating them become known that the responsibility of avoiding them arises. No one thinks of blaming a commander when his ship strikes a sunken rock not marked on his chart, but when once the danger has been clearly indicated he is regarded as blameworthy if he does not avoid it. The work of the Chloroform Commission has not altered the properties of chloroform in the least; an over-dose will kill as readily as ever, but we trust their attempts to define more clearly the way in which it kills, and the mode in which death may be avoided, will have the desired effect of preventing deaths in the future, just as marking the situation of a sunken rock will prevent further shipwrecks.

PUBLIC HEALTH IN VICTORIA.

THE Central Board of Health of Victoria refer in their last annual report to the increase of enteric fever not only in Melbourne but in the colony generally; and we have reason to believe that some very energetic and comprehensive measures are in contemplation, with a view of ascertaining the causes of this prevalence of disease, and of applying the necessary remedy. The report of a Royal Commission on the Sanitary Condition of Melbourne quotes in 1889 the words of Dr. Jamieson, to the effect that the rate of mortality from this disease is "always persistently high when compared with that of the chief English towns." It is evident from the annual report that suspicion rests largely with the water supply. Outside Melbourne it is believed that polluted water is the rule rather than the exception; and, although the metropolis has been successfully provided with an excellent water service, there is some risk that, either in its method of distribution or otherwise, all is not as it should be. Indeed, speaking of the colony generally, the prevalence of enteric fever is a source of much anxiety. The extension of leprosy to the colony by means of Chinese immigrants is attracting attention. At the leper quarantine establishment there are four patients and a Chinese attendant, and there has been recent legislation with a view to the more efficient control of the disease. The general record of the work carried out by the Board justifies their contention that they have anxiously striven to do their duty, and their hope that they may be able, in matters relating to public health, to keep Victoria in advance of

the other Australasian colonies is certainly a laudable one. The Royal Commission referred to was appointed to inquire into the sanitary condition of Melbourne, and three preliminary or "progress" reports have been issued which show that the Commission have entered very exhaustively into all the conditions which are calculated injuriously to affect the health of the city. Provisional recommendations are in the first report made under a number of headings, affecting either directly or indirectly such matters as the treatment of refuse, the pollution of the subsoil, the meat-supply, the construction of abattoirs, noxious trades, and the like. Two of these recommendations necessarily deal with such questions as water-supply and drainage, and since the city is divided into a large number of self-governing municipalities, it is held that the proper control of such matters must be vested in some central body. Hence a metropolitan board of works is advocated before the pressing matter of a general scheme of sewerage is dealt with. But the Colonial Government are evidently in earnest in their determination to remove preventable causes of disease, even if the immediate expense involved should turn out to be a large one; and in addition to the appointment of Dr. Gresswell as chief colonial health officer, to which we referred last week, Mr. Mansergh, a well-known London engineer, has gone out to confer locally with the Melbourne city authorities as to the best plan for a main scheme of sewerage. The third report is devoted to this question, and amongst the recommendations made are the following: That special provision be made for the drainage of the subsoil; that all channels for conveying surface drainage be so constructed as to prevent soakage into the soil; that the first flushings of the channels in wet weather be admitted into the sewers, but that all other storm-water be excluded from them; and, with a view to efficient house sanitation in connexion with drainage, that a system of registration of plumbers be established by law. The subject of the improvement and preservation of the public water service is dealt with in the second report, and amongst the suggestions made there is one which has interests beyond the confines of Victoria. It is as follows:—"We are of opinion that dogs should not be kept within catchment areas. It is well known that the hydatid disease of man is derived from a small tapeworm which exists in the intestines of dogs ..... Doubtless the disease is usually contracted by drinking surface water to which animals have access, and the parasite is probably more common in stray dogs than in those which are cared for. But we hold that unnecessary risks should not be incurred."

MEDICAL EXPERT EVIDENCE.

A CASE has recently been heard before the Recorder of Bradford which is of considerable importance both to medical officers of health and to the public. The owner of a slaughterhouse had been proceeded against by the corporation, and, an appeal being granted, it came before the Recorder. A medical officer of health in the service of another corporation visited the premises, and was prepared to give evidence on behalf of the owner, but was prohibited from doing so by his own authority. Another medical officer of health was also invited to give evidence against the corporation, but he declined to do so, expressing his unwillingness to oppose a sanitary authority, but eventually appeared on behalf of the Bradford corporation. The learned Recorder commented on the disadvantageous position in which private persons were placed, and stated that such procedure deprived them and the court of the skilled assistance to which they were rightly entitled. We fully recognise with the Recorder that the interests of justice require that expert evidence should be equally available for those against whom sanitary authorities proceed, as well as for the authorities themselves; but it seems to us that the proper remedy is that the witnesses should appear not on behalf of one side or the other, but on behalf of the court. This indeed is the proper position for a medical expert witness, and is one to which neither side could take exception. It should be within the power of the court to call to its aid the officers of public authorities, and to require them to freely express their opinion. This is a position which is consistent with the dignity of the profession, and would tend far more to promote the interests of justice than the present system, which often gives rise to conflict of opinion, serving no useful purpose.

"MIND BLINDNESS."

TWO additional cases in which this curious symptom was observed have recently been recorded in the *Archiv f. Psych.*, vol. xxi. In the first, recorded by Lissauer, a man of eighty had complained for a month of inability to find his way about, to tell his own position in a room, and to recognise objects, although his perception of light was scarcely impaired. Although he could not recognise objects by looking at them, he at once perceived and named them by means of tactile or auditory impressions from them. On examination he was found to have absolute right homonymous hemianopia. He had some aphasia, and could not read, but he could write. Perception and discrimination of colours in this case were preserved. In the second case, recorded by Siemerling, the onset was sudden. At first visual memory only was impaired; but he soon failed to recognise objects, even when he touched, tasted, or heard them. On examination he was found to have absolute right homonymous hemianopia, together with amblyopia in the left field in each eye. Colour sense was lost on both sides. There was also amnesic aphasia. In this case very great improvement occurred, the amblyopia on the left side improved, and colour vision returned. In neither case was there any change in the fundus. The association of "mind blindness" with hemianopia, and occasionally with loss of colour sense, has also been observed by Wilbrand, Charcot, Swanzy, and others. It is, however, very rare, while hemianopia is not uncommon; and Siemerling's case, where there was amblyopia in the left field, with complete loss of vision in the right, gives support to the hypothesis of Dr. Gowers that it occurs only when the cortical lesion is double.

ALLEGED ADULTERATION OF SACCHARIN TABLOIDS.

A VERY curious question was recently raised before the Nottingham Summons Court, by the prosecution of Boot's Pure Drug Company for supplying saccharin tabloids which were alleged not to be of the nature, substance, and quality of the article demanded. From the reports which have reached us, it would appear that Dr. Boobbyer, the medical officer of health to the borough of Nottingham, sent the following prescription: "Pulv. saccarin. 1 dr., ½ to 2 grs. to be taken with food. Tabloid saccharin, xii. One p. r. n." Upon analysis of the tabloids supplied they were found to contain 75 per cent. of milk sugar, the other ingredients being saccharin and a little carbonate of soda, which was added to make it more soluble. These facts practically were not challenged. The prosecution relied upon the difference in price between milk sugar and saccharin, and upon the possible injurious effects which might ensue if tabloids containing such a large proportion of milk sugar were administered to a patient suffering from diabetes. For the defence it was urged that no fraud had been committed upon the public, since each tabloid contained half a grain of

saccharin, and the tabloids were sold by number and not by weight. Even in the evidence for the prosecution it was admitted that it was invariably the case that tabloids manufactured by the chief makers should contain half a grain of saccharin and a grain or a grain and a half of other matter. Upon the question of possible injury to diabetic patients conflicting testimony was given, and in view of what was said of the skimmed milk treatment of diabetes, the magistrates found no difficulty in dismissing the summonses. Notwithstanding the quantity of milk sugar in the tabloids, the prosecution scarcely seems to have been necessary. So long as each tabloid contained the requisite amount of the drug it professed to enclose there is no advantage in inquiring into the ingredients which the manufacturers find necessary to add in order to ensure solubility or to give a convenient size. In the present instance the amount of milk sugar likely to be thus taken in the day by a patient with diabetes does not appear worthy of any consideration; it would probably be largely exceeded by the quantity taken with milk in tea or coffee, without saying anything about the skimmed milk treatment.

LECTURES AT THE COLLEGE OF SURGEONS.

THE following are the lectures to be given at the College on the dates mentioned, each to commence at 5 P.M. in the Theatre: Mr. J. Bland-Sutton, F.R.C.S., will deliver three lectures on Morphology in relation to Pathology on Monday, Feb. 10th, Wednesday, the 12th, and Friday, the 14th. Professor Benjamin Thompson Lowne, F.R.C.S., will deliver three lectures on the Embryology and After Development of Insects on Monday, Feb. 17th, Wednesday, the 19th, and Friday, the 21st. Professor William Watson Cheyne, F.R.C.S., will deliver three lectures on the Etiology and Morbid Anatomy of Tubercular Disease of Bones and Joints on Monday, Feb. 24th, Wednesday, the 26th, and Friday, the 28th. Professor Charles Stewart: Nine lectures on Phosphorescent Organs and Colour in Nature on Mondays, Wednesdays, Fridays, March the 3rd, 5th, 7th, 10th, 12th, 14th, 17th, 19th, and 21st. The dates and subjects of the June lectures are not yet announced.

THE GROWTH OF OUR LARGE TOWNS.

IT appears from the Registrar-General's returns for the first weeks of this year that, on the hypothesis that the rate of increase of population known to have prevailed during the last intercensal period 1871–81 has since been maintained, the aggregate population of the twenty-eight large English towns dealt with in that return, in the middle of this year, is estimated at nearly nine millions and three-quarters; this will exceed by 160,153 persons the estimated population in the middle of last year. It is seriously to be regretted that it should be necessary to depend upon so speculative a method for calculating estimates which serve as the basis for the vital statistics of our largest towns. It may be admitted, however, that while several of the estimates probably differ very widely (either in excess or defect) from the true numbers, there seems to be no sufficient reason for doubting the approximate accuracy of the estimated aggregate. It is worth noting that during the fifty-two weeks of last year the births exceeded the deaths registered in these twenty-eight towns by 111,538, being less by nearly 50,000 than the estimated increase of population during the year; this difference, it is estimated, was balanced by the excess of immigration over emigration. There has been a strong suspicion in recent years that the official estimates of the population of Newcastle-upon-Tyne and Cardiff, based upon the above-mentioned hypothesis, have understated their actual populations, and that the estimates for Leicester, Salford, and Bradford have exceeded the true numbers. Under the influence of the long-continued prevalence of high death-rates in Newcastle-upon-Tyne, the sanitary committee of the town council have recently requested the medical officer of health to report upon the expediency of having a local census of the population of the city, with a view of supplying a basis for the calculation of a more trustworthy death-rate. As, however, it appears to have been estimated that such a local census would cost £1000, it would seem improbable that so great an outlay will be sanctioned almost on the eve of the tenth national census, which will be taken early next year. The estimate for Newcastle-upon-Tyne was undoubtedly too low a year or two ago, but judged by the numbers of births registered in recent years the population cannot now be much under-estimated. The estimate for Cardiff is, however, in all probability, considerably below the true number of the population, but as its death-rate has been satisfactorily low in recent years the under-estimate has not attracted much local notice. Likewise, the unquestionable over-estimate of the present population of Bradford, Leicester, and Salford, which has the effect of under-stating the death-rates in those towns, is almost silently acquiesced in by the local authorities of those towns. These uncertainties as to the populations of our large towns detract much from the value of local mortality statistics as a means of influencing public opinion in health matters. The Government will before long have to draft the Act for the census of 1891, and all interested in public health should use their best endeavours to press upon the Government the importance of making provision for more frequent numberings of the population, even if a more detailed census should not be taken more often than decennially. The Registrar-General's estimates make the population of Registration London in the middle of this year 4,421,661, of Liverpool 613,463, of Birmingham 461,865, of Manchester 379,437 (or if Salford be included, 621,946), of Leeds, 363,799, and of Sheffield 332,837. The three smallest towns in the Registrar-General's list are Wolverhampton, with a population of 83,406; Halifax, with 82,034; and Plymouth, with 78,780. It may safely be asserted that in no other part of the world do so many towns of equally large size exist within such an area as that of England and Wales; and further, that no other nation of the world can point to such an aggregate of urban population having so low a rate of mortality as 19·3 per 1000, as was the case in these twenty-eight large English towns during last year.

THE PATHOGENY OF AUDITORY VERTIGO.

IN the interesting address by Dr. Buzzard, to be found in another column, he has pursued a line of thought which he has fruitfully applied to the associated symptoms of tabes in explanation of the cause of paroxysmal vertigo, commonly known as Ménière's disease. Of the value of Ménière's observation there can be no question. It threw a flood of light upon a very obscure subject, by referring many cases of giddiness to disease of the labyrinth, especially of the semicircular canals, rather than to simply reflex disturbance. But to attribute all cases of vertigo associated with tinnitus and deafness to actual ear disease is, as Dr. Buzzard shows, not warranted by facts; and there is, moreover, another possible explanation, which he considers applies to many if not the majority of examples of this distressing symptom. This is the reference of the disorder to the auditory nucleus in the medulla, and not to the periphery of the nerve. The arguments he advances appear to be sound, for not only is there the negative evidence of the absence of any ear disease in many cases, but it has been shown that a lesion of the trunk of the nerve may produce the phenomena. The chief arguments are those from analogy. To Dr. Buzzard we owe the discovery

of the dependence of the gastric and laryngeal crises in tabes with disease of the medulla, and there are cases where trigeminal neuralgia has been traced to like central disturbance. In the associated symptoms of paroxysmal vertigo are to be found strong reasons for accepting his explanation. Deafness on his view would be as frequent a concomitant of vertigo on the medullary as on the labyrinthine hypothesis, although it is conceivable that a central lesion may at times be so limited as to affect only that area which is directly connected with the semicircular canals, and not that more directly connected with hearing. Dr. Buzzard gives one case where hearing was unimpaired. The other symptoms found more or less often in association with vertigo, such as vomiting, irregularity of heart's action, sweating, faintness, neuralgia, and even glycosuria, are all consonant with the notion of central disturbance, involving also one or other of the medullary nuclei of the vagus and trigeminal nerves, and of the vaso-motor centre. Indeed, it is difficult to account for such concomitance of symptoms except on this hypothesis, for otherwise one would have to invoke the capricious *deus ex machinâ* of reflex action to explain it. The most important outcome of every pathological doctrine, however, is the light it throws upon treatment. Here we have the notion that, as in migraine, the nervous centre is perturbed by some agency, which may be transient, or at least removable, so that the symptoms may be dispelled by appropriate remedies. If the ear be organically deranged, such a satisfactory result might be impossible. Dr. Buzzard quoted cases in which there was apparent relationship between the auditory vertigo and gout, or rather retention of uric acid in the system, and he finds in the good effects of the prescription of salicylate of soda a confirmation of the suggested connexion between the diathetic state and the attacks. We commend Dr. Buzzard's views to the attention of neurologists. They seem not only to be reasonable, but far more tangible than the somewhat shadowy reference to disturbance of the functions, or the still more problematical organic derangement, of the labyrinth, which form the basis of Ménière's doctrine.

REMOVAL OF A SACRAL TUMOUR.

A NOTEWORTHY case under the care of M. Thiriar at the Hôpital Saint-Jean is recorded in *La Presse Médicale Belge* (1889, No. 50). The patient was a man fifty-six years of age, who for eight years previously to his admission in June, 1889, had suffered from a tumour in the sacro-coccygeal region, which was accompanied by very intense pruritus ani. The growth gradually increased and caused so much trouble and pain that in 1886 it was operated upon. It, however, recurred, and he became unable to lie upon his back, whilst walking was difficult and painful. A soft fixed tumour was detected in the sacro-coccygeal region, and also projecting into the interior of the rectum. It was removed by means of a transverse incision six centimetres long, a finger's breadth behind the anal orifice, and another incision eighteen centimetres long in the median line, perpendicular to the former and reaching to the level of the last lumbar vertebra. The coccyx was found to have entirely disappeared, and the growth, which was dissected off the posterior wall of the rectum, was found to involve the lower part of the sacrum. M. Thiriar therefore proceeded to resect subperiosteally the central part of the sacrum, about seven or eight centimetres by four centimetres. Paquelin's cautery was used to arrest the bleeding from the bone and periosteum. The patient made a rapid and good recovery; two months later he was free from pain, there had been no recurrence, and rectal and vesical functions were normally performed. The tumour proved on microscopical examination to be a sarcoma.

PLASTER-OF-PARIS SPLINTS.

DR. POWELL of Toronto recommends the following method of applying plaster-of-Paris splints for certain kinds of fractures of the leg. "The leg is to be bandaged with cotton batting, which for the purpose is torn into strips four inches wide and applied as a roller. Using the sound leg as a model, to save the injured one from movement, a pattern is cut which will cover in all of the leg excepting a space an inch wide along its anterior aspect. Deep slashes opposite the heel allow the part for the sole of the foot to be brought into a right angle with that for the leg, without forming clumsy folds at the ankle. From this pattern four or five layers of scrim or from six to nine of cheese-cloth are cut. Then, with extension made and the foot properly held, the strips are to be saturated with a cream made by sifting, not stirring, plaster into warm water, smoothed one upon another, applied to the posterior aspect of the limb, interleaved by the slashes at the ankle so as to hold the foot at right angles with the leg, moulded to the part, and then firmly bandaged to it with a cotton roller." "Scrim" is a coarser and stronger material than cheese-cloth, and hence a smaller number of layers suffice to make a firm splint. This is a modification of the well-known Croft's splint, and it is recommended as being very easily applied, comfortable, durable, and thoroughly efficient.

THE GENERATIVE ORGANS IN ADDISON'S DISEASE.

FEW detailed observations as to the pathology of the generative organs having as yet been published, the particulars of the following case, communicated by Professor Ludwig Kleinwachter to the *Deutsche Medicinische Zeitung* will be found interesting. The author found in a woman of twenty-nine years, suffering from Addison's disease, considerable interference with the nutrition of the generative organs and mammæ. The mons veneris was free from hair and fat, the labia flaccid, the vagina patulous, with its walls inclined to prolapse. Of the vaginal part of the uterus only a portion the size of a bean could be felt. The position of the uterus was a little to the right, and it was remarkably flaccid, with extremely thin walls; its cavity did not measure four centimetres. The ovaries were atrophic. Nine months ago menstruation had ceased, and with it all desire for sexual intercourse. The mammæ had completely disappeared. It will be seen that this pathological result is remarkably like the normal atrophy of old age.

CONTAGIOUS PNEUMONIA.

DR. F. MOSLER, in a paper read before the Greifswald Medical Society, gives details of a series of cases of acute pneumonia in a family where there seemed every reason for believing that contagion was the cause of the spread of the disease. The patients were all attacked during the last fortnight of January, 1889, the first to fall ill being the father, who died on the 22nd, the fifth day of his illness. On this day his wife was attacked, and she too succumbed on the fifth day of the disease. Whilst she was ill, her son, who constantly visited his parents during their illness, himself was attacked on the 26th. He was thirty years of age, strong and temperate, but succumbed on the twelfth day of the attack. Further, his sister, who had come from Arendsee, near Stralsund, to be with her sick parents, and who stayed in their house from the 22nd to the 26th, was attacked at Arendsee on the 29th, and was admitted into the Greifswald Hospital. She alone recovered. Dr. Mosler points out that the parents' house was dry, the two rooms they inhabited were well ventilated and clean, and that there had been no illnesses in the house within the past five years. He thinks the father must have acquired his pneu-

monia outside, and that the disease was communicated in turn to the members of his family by contagion through the sputa. In the case of the son a post-mortem examination showed that the form of pneumonia was not the typical one: it was more lobular, was accompanied by a hæmorrhagic pleurisy, and by swelling of the spleen. Moreover, an examination by Professor Grawitz of some of the fluid withdrawn from the lung of the daughter during the height of the disease resulted in the discovery of bacilli resembling those of rabbit septicæmia, but neither the pneumono-bacillus of Friedländer nor the pneumonococcus of Fraenkel was found. In the case of the son the blood from the heart yielded a similar micro-organism. Dr. Mosler thinks that such facts, as well as the peculiarities of the morbid anatomy of the latter case, suggest the occurrence of a special form of pulmonary inflammation, owning a cause different from that of the ordinary form. He sees in such cases a reason for believing that many varieties of poison may give rise to pneumonia. But the main lesson from the cases is that of contagiousness, and the need for the careful disposal and disinfection of the sputa, which he believes to have been the infective medium in these cases. He refers to recent contributions of Finkler and Cantani on infectivity of pneumonia, the latter recording some striking instances where the disease was more of the lobular than the lobar type.

THE PREVENTION OF TRAMWAY ACCIDENTS.

A SURGEON draws attention to the disproportionate frequency of tramway accidents, respecting which his experience in connexion with one of our largest hospitals enables him to speak with authority. The movement of the tram car, as he points out, is governable only by arrest in a straight line. Unless this can be almost instantly accomplished, it is impossible for a driver to avoid any object which may happen to come before the wheel. Such instantaneous arrest is, as a rule, impossible. In this respect the behaviour of the tram-car resembles in a modified degree that of the railway engine. It is therefore suggested that a method of preventing such accidents already applied in the case of the locomotive might be adapted to the street car. This consists in placing a projecting guard in front of the fore-wheels in such a manner as to ensure a clearance of the line and to obviate, if not a broken bone, at all events the almost hopeless mangling which occurs when some heedless wayfarer or straying child is run over by the passing vehicle. The proposed remedy, most simple and inexpensive as it is, deserves the careful attention of the tramway companies.

THE FIRE AT FOREST-GATE.

THE sad experience afforded by the recent fire at Forest-gate Schools will not have been wasted if its lessons are duly appreciated and applied for the prevention of similar calamities in future. The coroner's inquiry leaves little room for doubt that the disaster was entirely accidental. Unfortunately, it is also but too evident that the primary accident in this case might with a reasonable degree of forethought have been prevented, and the same may be said with even greater truth of the fatal issues to which it formed the melancholy introduction. The decision of the jury was unusually full, precise, and intelligent. Having regard to the cause of the catastrophe—the ignition of soot which had fallen behind the wooden blind covering a disused fireplace,—they advised that any such barrier should be made of metal. The custom of locking dormitories—which, whatever its advantages, was on this occasion one cause of the fatal delay which cost so many lives—was strongly condemned. Other suggestions of practical value related to the appointment of night watchers for the wards, to arrangements for a constant and full water service, for sufficient light in passages, dormitories, &c., for ready exit by swinging doors, for regular official inspection (as in the case of theatres), and for more direct communication with neighbouring fire brigades. A noteworthy proposal advised the formation of fixed fire escapes in the shape of outside iron staircases. Another suggested the appointment of a staff specially trained to work fire extinguishing appliances. This latter body, as the coroner remarked, might be furnished by the school officials themselves. Most of the above proposals appear perfectly feasible, and, if some patience and skill in contrivance be required to carry them through successfully, it will be generally allowed that the prevention of such lamentable occurrences as those attending the late fatal fire is an object worthy the expenditure of more than average energy.

SIR EDWIN CHADWICK.

THE condition of Sir Edwin Chadwick, which we reported last week, remains about the same. Despite his great age and the physical depression which has naturally followed a severe attack of bronchitis, he has held on surprisingly, being able occasionally to rise from bed for short periods, retaining his mental powers and still taking interest in his favourite studies. The latest message received by us, at the moment of going to press, is "slight improvement."

CHOLERA IN MESOPOTAMIA.

THERE seems to be little doubt of the advance of cholera in Asia Minor, and therefore of the increasing probability of its invading Europe. Intelligence was received this week from Bassorah stating that 3000 fatal cases had occurred there, including the English Vice-Consul, Mr. Robertson, and two of his children.

THE "B.P.C." UNOFFICIAL FORMULARY.

THOSE interested in the British Pharmacopœia will note with a certain satisfaction that the additions of the unofficial formulary committee appointed by the British Pharmaceutical Conference have not been very numerous this year. Only the following nine formulæ are suggested:—Acidum hydro-cyanicum (Scheele), acidum hypophosphorosum, chloroformum aconiti, chloroformum belladonnæ, chloroformum camphoratum, elixir sennæ, extractum hæmatoxyli liquidum, syrupus calcii hypophosphitis, and syrupus sodii hypophosphitis. Perhaps the first is the most important, as it is calculated to ensure greater uniformity of strength than the Scheele's acid of commerce is commonly credited with. The formula for hypophosphorous acid is introduced on account of the differences which are so frequently found in samples obtained from the best makers. Of the three chloroform preparations there is little to be said; the third is a simple solution of camphor in chloroform, and in the others the solvent action is assisted by strong solution of ammonia.

SANITATION IN LONDON IN 1889.

MR. JOHN HAMER, the Honorary Secretary of the Mansion House Council on the Dwellings of the Poor, writes to *The Times* an interesting summary of sanitary proceedings in London in 1889. Everything, he observes, betokens an increase of public interest in this subject. The debate in the House of Commons on the Queen's Speech, the hopes held out by Mr. Ritchie of a District Council Bill and the consolidation of Acts of Parliament, the success of representations to police magistrates by private persons, all show that the public conscience is awakened, and only the requisite machinery is now wanted to carry into

effect the intentions of Londoners. The constitution of a County Council for London is the beginning of a better administration; but, as Mr. Hamer points out, as yet this body can only touch the fringe of the subject, the appointment of District Councils must be carried out to put the keystone to the arch. We sincerely trust that there may be no circumstance which will interfere with the completion of what Mr. Hamer properly calls Mr. Ritchie's great work. Mr. Ritchie has excited the appetite of the metropolis for a complete administrative system; to fail to satisfy this desire would produce a feeling of profound discontent.

FOREIGN UNIVERSITY INTELLIGENCE.

Bonn.—Dr. Eigenbrodt has qualified as *privat-docent* in Laryngology.

Halle.—Dr. Eixler has qualified as *privat-docent* in Anatomy.

Moscow.—Dr. Karmiloff, formerly assistant to Professor Sklifosovski, has qualified as *privat-docent* in Surgery.

Naples.—Dr. di Vestea has qualified as *privat-docent* in General Pathology; also Dr. Carpentieri as *privat-docent* in Midwifery.

Pavia.—Dr. Omboni has qualified as *privat-docent* in Operative Medicine.

Kharkoff.—Dr. Ponomareff has been promoted to the rank of Extraordinary Professor of Children's Diseases.

Vienna.—Dr. von Brücke, Professor of Physiology, is about to retire at the end of the present session. It is proposed to divide his chair into two separate Professorships of Physiology.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following eminent foreign medical men are announced:—Dr. Benedikt Schulz of Vienna, who is well known for his researches in electro-therapeutics.—Dr. Josef Paneth, *docent* in Physiology in Vienna.—Dr. Johann Paul Thaler, Professor of Midwifery in the Midwives' School at Linz.—Dr. Lapchinski, Professor of Special Pathology and Therapeutics in Warsaw.—Dr. Theodor von Dusch, Professor of Medicine, University of Heidelberg.—Dr. Paquet, Professor of Clinical Surgery in Lille.—Dr. Maccari, Professor of Midwifery in Genoa.—Dr. James H. Hutchinson, Vice-President of the College of Physicians, Philadelphia.

As chairman of the committee of the Yorkshire Fishery Board appointed to deal with river pollution, Lord Wenlock has addressed an important letter to the County Councils of the three Ridings, on the serious pollution of the rivers by sewage, dyes, and chemicals, by which fish are poisoned and a nuisance created. The Councils are requested to exercise the powers conferred upon them for the prevention of such contamination of the streams, and the Fishery Board offer to assist them as far as they are able.

THE death of Mr. Alexander Shaw, F.R.C.S. Eng., at the age of eighty-six, took place at Kilburn on the 18th inst. Mr. Shaw was consulting surgeon to the Middlesex Hospital; but had for several years retired from the active duties of his profession. In a future number we hope to give a sketch of the life and work of the deceased surgeon.

WE are informed by Messrs. W. H. Allen and Co. that a statement which has appeared in a contemporary, to the effect that the *London Medical Recorder* will not again be published, is without foundation.

REPORT OF THE LANCET
Special Sanitary Commission
ON
BAKERIES AND BREAD-MAKING.

No. III.

THE results achieved in Belgium through the individual initiative of a few of the working class were described in our last report. There is hardly any country in Europe where the Government more rigorously abstains from interference in economical matters than in Belgium. Though the working classes now in the main manufacture their own bread, and secure cheap and unadulterated food and good wages for the journeymen bakers whom they employ, they have done this solely by voluntary association and organisation. They have received no sort of aid or patronage from the authorities. In France, what reform has been attempted has been carried out on exactly opposite lines. Ever since the "taxe" on bread was imposed, since the law of March, 1791, and the Article 30, by which the Constituent Assembly imposed a tariff on bakers, followed two years later by the "maximum," established by the Convention, the French people have considered the Government in a great measure responsible for the price and the supply of bread. When bread was dear, the stability of Governments trembled in the balance. "Le pain à vingt sous et le plomb au bout" is an old sinister saying which no French Government can afford to disregard. Though in France many questions on which public health depends have been neglected, a cheap and good bread-supply has always held the first place in the considerations of the Government. For this purpose the "taxe" was imposed, by which the price of bread is fixed according to the current price of wheat, and the public protected against a possible combination of master bakers. This is not the only way in which the authorities have interfered. Of course the troops bake their own bread, for, in so important a matter as this, the bread-supply of the forces is not entrusted to a contractor. But, apart from the army, there has been established, and for many years, a municipal bakery in Paris. It is situated in the Rue Scipion, close to the Boulevard des Gobelins, and, of course, we made it our duty to visit this important establishment. A great portion of the building is very old, and formerly formed part of a convent. Nevertheless, and as compared with other French buildings, it is in good condition from a sanitary point of view. The closets are well apart from the bakehouse, and are abundantly ventilated on to the outer air. They are defective in construction, as are almost all closets in France, but they are more constantly washed, more thoroughly ventilated, and more carefully separated from the rest of the building than is generally the case in establishments of this sort. The place where the flour is converted into dough is spacious, has large windows and a lofty ceiling. The bread, therefore, is exposed to no special risk of contamination, while the bakers who make it have plenty of air, light, and room, and are not obliged to endure any great heat, or the sulphurous exhalations from oven furnaces. This is not the only advantage they enjoy. The wages they earn are scarcely higher than what they might receive from private employers, but they work shorter hours for the same money, and are ensured constant employment. Further, in old age, they are guaranteed against want. A small pension is given them; in fact, it is quite certain that the Paris municipality would not allow an old and faithful servant to come to grief. Finally, the bakers may take away as much bread as they require for their home consumption. Altogether thirty-four journeymen bakers are employed in this municipal bakery, and they are divided into three brigades, working in shifts of eight hours each. Thus, the bakery is kept going both day and night, but the workmen so alternate their shifts as to share equally between them the less pleasant and more exhausting night work. All these circumstances have a direct effect on the workmen's health. In town, working for the private trade, they rarely keep their employment long, but the municipal bakery ensures them a constant, regular, and sufficient income, thus sparing

them from the depressing effects of the uncertainty entailed by the hazards and anxieties in the struggle for existence which have so marked an effect upon the physique, and especially upon the nervous system.

The chief purport of the bakery at the Rue Scipion is to supply the hospitals and asylums of Paris with bread. These number in all twenty-eight institutions, of which two, though populated by Parisians, are outside Paris. But bread was at one time also supplied to the Paris Municipal Guards, to the fire brigades, and to some of the public schools and colleges. From 1856 to 1870, under the Second Empire, depôts of the municipal bread were opened in all the public markets, and the loaf sold a halfpenny cheaper than the price fixed by the "taxe," making an economy of a penny on the 2 kilos or 4 lb. At that period the Rue Scipion bakery produced 25,000 kilos of bread. After the Franco-German War, these efforts to satisfy the demands of the poorer sections of the Paris population were abandoned, and the municipal bakery was only allowed to provide bread for the twenty-eight hospitals. Thus the present output is reduced to only 14,000 kilos, or 2 lb. loaves. The quality of this, as might be expected, is superior to the bread of commerce. Of course it is not a luxurious bread, nor is it quite so white as many Parisians would desire, but the white bread is not necessarily the best. It is all a question of *bleutage*—that is, of "bolting" or sifting the flour. If very white flour is required only 63 per cent. of the wheat is utilised. There is about 14 per cent. of bran in wheat. Then the cerealine, which is the principle of fermentation in wheat, has also to be removed. Further, by the use of the Hungarian grinding-mill they can split the grain and clear away from the central crevice the dust and dirt that there accumulate, together with the little germ. On the other hand, the closer we get to the bran the greater the quantity of gluten obtained, and this practically renders the bread better, at least in substance if not in appearance. Now, though at the Rue Scipion the machinery employed is not of the best, it is, nevertheless, very superior to what is generally used in the trade. Consequently, a bread is produced there which is superior to the second quality bread, because it contains all the parts that go to constitute first quality bread, and only a small proportion of that which makes bread of the second quality. Then, in spite of the fact that the space and machinery of the bakery and mills are not fully employed, since only 14,000 loaves are made where from 25,000 to 30,000 could be produced, the bread, besides being better, is also cheaper.

The Paris municipal bakery cannot be compared with that of the *Vooruit* at Ghent; but, nevertheless, it is an advance on the generality of the Paris bakeries, and has the advantage over the *Vooruit* of possessing flour mills on the same premises, and of making its own flour. The kneading machines and the ovens, though good, are yet inferior to those employed at Ghent. Therefore the Paris municipal bakery must not be taken as a model. Still, the results achieved are satisfactory. For instance, in 1886 the mills at the Rue Scipion bakery ground 4,574,315 kilogrammes of wheat, which produced 3,410,000 kilogrammes of white flour, which is about equal to a sifting of 74·56 per cent. In the bakery 3,343,195 kilogrammes of flour produced 4,459,490 kilogrammes of bread—that is to say, 133 39 kilos of bread for every 100 kilos of flour. The expenses were 1,220,207 fr. Thus the bread cost 27,335 fr., which, roughly speaking, is equal to 2¾*d.* the kilo loaf. During the course of that year the average official "taxe" on bread was 0·334 fr., or, roughly, 3¾*d.* the kilo. Thus, the municipal bread was ·061 c. cheaper than the official "taxe," equal to a saving of rather more than a halfpenny per loaf, or 18 per cent.; and it must be borne in mind how important the smallest fractions are when dealing with the bread question. In Paris, the loss of 1 c. on the kilo of bread is equal to 3,000,000 fr. per annum (£120,000); or, for London, something like £250,000.

On several occasions, under the Empire, the high price of bread caused the Government the gravest anxiety. A fund was formed by which advances were made to bakers to enable them to sell the bread cheaper, and these advances were repaid when the price of wheat fell. This expedient, however, did not work satisfactorily, and the Government consequently made an appeal to the bakers to reduce the price of bread by wasting a smaller proportion of the corn. Thirty to 34 per cent. of the wheat was extracted and taken away in the process of making flour, and the Government urged that this loss should be reduced to 15 or 20 per cent. These proposals were badly received by the trade. The bakers urged that the bread would not be sufficiently white, and the population would refuse to take it. The dough could not be easily manipulated, and bread-making would be rendered more difficult. Such bread also would not soak well in soups &c. Finally, the saving would not be very great, as the bran &c. taken out of the wheat was very easily sold. This resistance on the part of the trade led the Government to take the matter in its own hands, and it set the example in the State bakeries at Chaillot, where bread is made for the army, and at the municipal bakery in the Rue Scipion, where bread is made for the hospitals. It was there demonstrated that it was only necessary to sift out 24 or 25 per cent. of the wheat, and that with a flour, amounting to 75 per cent. of the wheat ground, bread of a very acceptable colour was produced, which answered all the purposes required, and this at a considerable reduction in price. The fact is, that when the mill yields 75 per cent. of flour, the dough made from such flour is richer in gluten, is therefore more sticky and more heavy to handle, and runs the risk of being insufficiently mixed. This difficulty is, however, readily overcome by the use of machinery, which does not get exhausted, but will continue kneading as long as necessary. The fact that the new process would necessitate the use of machinery is the real explanation of the resistance of the master bakers of Paris. M. Dumas, the eminent chemist, was appointed by the Government to report on the whole question just at a time when the Empire was anxious to alter its policy by abolishing the "taxe" on bread and by ceasing all interference with the trade. Nevertheless, M. Dumas was led, by the evidence before him, to report in a contrary sense. He even visited London and examined the sort of bread that was manufactured in England under the *régime* of absolute freedom. He found that the English bread was adulterated with potatoes and other substances, and that the pure and good bread was made in Paris, where its manufacture was checked and controlled by Government.

The bread given to the sick in the Paris hospitals is of uniform and excellent quality. The people regret that this bread is no longer sold in the public markets, and a formidable agitation has arisen in favour of largely extending the scope and action of municipal bakeries. After a very lengthy debate in the Municipal Council, a resolution stating "that it is necessary to create in Paris a service of municipal bakeries" was carried by 43 votes against 31. A second resolution appointed a committee of eight municipal councillors to study how this could best be done. With regard to the "taxe" on bread established by the law of 1791, there is a Bill before the National Assembly for its abolition; but the Municipal Council adopted, by 57 votes against 6, the following resolution: "The Council expresses the hope that the Chamber of Deputies will reject the proposal for abrogating the law of 1791."

Such is the present position of affairs in Paris, and it certainly points in the direction of the municipalisation of the bread trade. This, however, will take a long time to accomplish. Paris consumes annually 350,000,000 kilogrammes of wheat, and it will require some organisation and administration before such a business can be managed by a municipality, to say nothing of the resistance of the 1800 master bakers who actually make the bread consumed in Paris. Brussels has also, though on a very small scale, its municipal bakery. This is situated within the precincts of the Hospital St. Jean. The committee managing the poor relief—Assistance Publique—is appointed by the Brussels municipality, and its accounts are checked by the municipality. It manages the hospitals and has established the bakery, which could turn out 4000 kilos of bread per day; but when, a short time ago, we visited this establishment, they were only making 1000 kilos a day. Sometimes, we were told, when a great deal of distress prevailed, and the authorities gave out exceptionally large quantities of bread to the poor, they made 1500 kilos in the day. The bakery has its own flour mills, so as to avoid fraud in the quality of the flour, and they generally extract from their wheat 74 per cent. of flour. As in Paris, the journeymen bakers working for the municipality are better off than when working for the private trade, and yet the bread they make only costs 24 centimes the kilo, while the general charge in bakers' shops is 32 centimes. The bread also is more nutritious. From a sanitary point of view

we do not approve the idea of a bakery being situated in a hospital, particularly as it is close to the washhouse of the institution. It is true that infected linen is sent to the disinfecting oven before it goes to this washhouse, still such proximity is not agreeable. The room also where the bread is kneaded is dark and low. Altogether this bakery is on a small scale, and it seems as if the object had been to utilise a portion of the existing building rather than to construct something really suitable for the purpose. Nevertheless, the great fact remains that at Brussels, as at Paris, better and cheaper bread is made by the authorities themselves for the use of the hospitals and the relief of the poor than can be obtained from private manufacturers.

THE UNIVERSITY OF LONDON.

Convocation and the proposed Reconstitution of the University.

CONVOCATION of the University of London met on Tuesday last, the 21st inst. There was a larger attendance of graduates than usual. The chair was taken by Dr. Wood, Chairman of Convocation, who explained that the Senate had prepared a scheme for a revised constitution of the University, to form a basis of conference with University College, King's College, the Royal Colleges of Physicians and Surgeons, and the Incorporated Law Society. He explained that the scheme had been drawn up after conference with the Special Committee of Convocation, and, although it had not been communicated to each member of the House, it was technically before them in the minutes of the Senate, which the Registrar had laid upon the table.

The following resolution, moved by Dr. M. BAINES, seconded by Mr. BENTWICH, LL.B., was passed: "That the attention of the Senate be respectfully drawn to the resolution adopted by Convocation at its meeting held on Jan. 18th, 1887, whereby the Senate was requested to select an appropriate motto for the University.

Mr. SPRATLING, B.Sc., then moved: "That this House respectfully prays the Crown and the Senate so to draft the proposed new Charter that the retirement scheme, so far as it relates to members of the Senate elected by this House, may come into operation concurrently with the granting of the Charter." He pointed out the advantage of members of the Senate elected by Convocation having the opportunity of coming before their constituents to render an account of their services before re-election.

Dr. BAINES seconded the motion.

Sir P. MAGNUS moved that the House proceed to the next business on the agenda, since the motion was premature, no scheme being before the House.

Mr. NESBITT did not think that Convocation should at present express any opinion on any subject connected with the new Charter.

The CHAIRMAN ruled that Convocation had the right to discuss any matters connected with the University. He explained the procedure formerly adopted in the case of the University obtaining a new Charter, when the Senate submitted it to the House for approval; that obtained, the petition to the Crown was signed by the Chancellor and the Chairman of Convocation. The Charter was then sent back to Convocation for its final acceptance.

Dr. W. J. COLLINS was under the impression that at a previous meeting Convocation had thanked Her Majesty for granting them the same privilege of access to the Crown as was enjoyed by the Universities of Oxford and Cambridge. He said it was quite competent for the House to discuss the scheme, since a committee of Convocation had conferred with the Senate upon the subject. It was not the fault of the committee that the scheme was not before the House.

The CHAIRMAN pointed out that a copy of the scheme was in the minutes of the Senate just submitted to the House, which therefore had clearly a right to treat of it.

Dr. BENNETT agreed with Sir P. Magnus that it would be very inconvenient to discuss the scheme in its present form. Although technically the scheme had been presented to Convocation, the majority of members had not seen it. It would be futile to discuss it before it was submitted in its final form.

On a division, the amendment of Sir P. Magnus was carried.

Mr. SPRATLING then moved: "That this House, while concurring in the recommendation of the Senate that (some) Bachelors of Medicine should receive the degree of Doctor in that faculty, is strongly of opinion that such degree should not be conferred upon mere pass-men, but that a certain recognised standard in this examination with honours should be decided upon, and none but those who have reached that standard should receive the higher degree, and also that the same course should be adopted with regard to Bachelors of Arts (and the M.A. degree) and Bachelors in the other faculties."

Mr. WATSON seconded the motion.

Sir P. MAGNUS moved to pass on to the next business. It would be very premature to pass such a resolution. The Senate had thought it best that the Colleges should be approached before submitting any scheme to Convocation. He contended that no scheme was before the House; it was not even before the University. All that had been done was for the Senate to prepare a basis of conference with the Colleges. It might be that the Colleges would altogether object to it, and if so, it would be waste of time now to discuss it. He did not wish to check free discussion, but thought there would be ample opportunity when the Draft Charter was sent down to the House.

A Medical Graduate, who said he had travelled far to oppose Mr. Spratling's resolution, declared that it would be very injurious to the University, and very unjust to the M.D.'s, to assent to the proposal of the Senate. It was now proposed to make a most invidious distinction between those who had taken honours at the M.B. and those who had not. Let those who desired the M.D. work for it, as he had done. If the University was to hold its own, to maintain its pre-eminent position, the value of the degrees must be kept up.

Mr. HINTON pointed out that the House had not any assurance that it would have an adequate opportunity for expressing its opinion on the scheme.

Mr. SPRATLING asked when the scheme would be considered. He had been informed that a draft would be sent down to Convocation, which would only have the option of accepting it or rejecting it. His motion was founded on a portion of the scheme which the Senate had decided to put forward.

The CHAIRMAN said that no new Charter could be passed without Convocation being consulted. If the Charter were rejected by Convocation, then the Government would probably do what they thought best to give effect to the recommendations of the Royal Commission.

Mr. TYLER said the Senate should have first consulted Convocation before going to King's and University Colleges.

The CHAIRMAN pointed out that the Senate, before preparing the scheme, had consulted with the Special Committee of Convocation.

Mr. SMITH OSLER, as a member of the Senate, would be sorry to think that when the Draft Charter came down to Convocation there would be no opportunity given for the House referring it to a committee to draw up reasons for or against its provisions. It could hardly be that the submission of the Draft Charter to Convocation should be merely nominal.

The CHAIRMAN said he was careful not to lead the House to think it had greater powers than were conferred upon it by Charter. Should it think fit to reject the Draft Charter, it could embody its reasons for so doing in a series of resolutions. At the same time it must be remembered that they had not an unlimited time in which to make up their minds; and they must take care lest the Government stepped in, prepared to act, if they failed to agree.

Dr. SILVANUS THOMPSON said that Mr. Spratling had given good reasons why his resolution should be negatived. He was asking the Senate to pledge itself on one item of its scheme, and he did not think the time had come for any such action.

The motion of Sir P. Magnus was then put, and lost.

Mr. J. SULLY moved the adjournment of the House for four weeks, in order that members of Convocation might have the opportunity of seeing the scheme of the Senate. He said the House was actuated by a mixed feeling: on the one hand, it did not desire, out of respect to the Senate, to embarrass its action in the initial stage of the question; on the other hand, Convocation had not only the right but the duty to protest against any provisions of the scheme if necessary. If the Senate contemplated lowering the degrees, then Convocation had the clear duty to express its dissent

to such a proposal. He therefore thought that opportunity should be given for the careful discussion of the Senate's proposals.

Dr. R. BARNES seconded the amendment.

Mr. TYLER pointed out that his resolutions, which stood next on the agenda, were based on the recommendations of the Royal Commission, which every member could have obtained during the past nine months. He did not dread the foundation of another University, whatever it be called—Westminster, or St. Pancras, or what not; but let the University of London stick to the position it had gained.

Dr. CURNOW asked for the report of the Special Committee, which would form a basis for discussion.

Dr. BAINES, on behalf of the Special Committee, said it would be premature for them to report yet. In due course a report would be presented.

Mr. SULLY'S motion was then put, and declared lost.

Dr. COLLINS moved an amendment respectfully requesting the Senate to communicate to Convocation the proposed scheme, in order that the House might have "that reasonable time" which the Royal Commission had desired Convocation should have to consider any scheme for the reconstitution of the University. He said that if it was not premature for the Senate to consult outside bodies, surely it was not premature to communicate the scheme to the House.

Mr. BONE seconded the amendment.

Mr. WHITEHEAD pointed out that the scheme had been laid on the table, and was technically before the House.

Sir P. MAGNUS also said that the Senate had communicated it to the House. He could not support the amendment. It would be wiser for the House not to deal with this purely "provisional scheme," which was drawn as a basis of conference with other bodies, but to await the final draft. The Senate had not been discourteous to Convocation, since it had consulted a committee of that body, and Convocation should wait for that committee's report.

Dr. BARNES said that simply laying the scheme on the table came to nothing.

Dr. COLLINS having altered the terms of his resolution to an instruction to the Clerk of Convocation to circulate the scheme among the members, his amendment was carried, it being understood that the date of the special meeting of Convocation for its discussion should be left to the Annual Committee.

Mr. TYLER then moved: "That the proposal of the University for London Commission, that, under a new Charter for this University, special powers and privileges should be conferred on certain institutions in or near London, is incompatible with the fair and just treatment of the provincial Colleges, and that the acceptance of this proposal would be detrimental alike to the interests of the provincial Colleges and to those of the University itself." He characterised the proposal to restrict the privileges of the University to colleges "in and near London" as an absurd anachronism, and pointed out that no University was a merely local institution, intended for the town in which it was placed. The tendency of modern civilisation was to do away with all local restrictions. He denied the statement of the Royal Commission that University and King's Colleges had grown in importance. At the last B.A. examination these two Colleges only passed fourteen candidates out of a total of 238, whereas in 1854 they had thirty-eight out of seventy-eight. The Welsh colleges—which, under this scheme, would be excluded from a share in the government of the University—last year passed twenty-six B.A.'s, or nearly twice as many as the London Colleges. At present these two Colleges had a large share in the examinerships of the University, and he regretted that the original proposal of Mr. Warburton, that no professors should be examiners, was not enforced, for he did not think the teaching and examining functions could be combined. The Commission asked them to put aside all their traditions at a time when the University was exceptionally prosperous. They had no fear of another university being founded, for he felt sure that the example of Victoria University showed how little was to be expected from another university. The University of London would always maintain its position if allowed to continue on its old lines.

Mr. LYNN seconded the resolution.

The resolution was opposed by Sir P. Magnus, but, after some discussion was agreed to, and a motion for adjournment was then made and carried.

THE INFLUENZA.

WE are glad to observe that the Medical Department of the Local Government Board is endeavouring to obtain information upon the origin and mode of distribution of influenza in Great Britain by the issue of a circular to medical officers of health—a "collective investigation" in fact. Personal inquiry into the subject is also being made by Dr. F. Parsons and Dr. Bruce Low of the Local Government Board. The questions in the circular run as follow.

"Has any 'influenza,' particularly if characterised by much nervous depression, severe frontal headache, or various muscular pains, shown itself in your district?

"The date of the first occurrence (as far as you know) of such an influenza.

"The date of commencement of any extensive prevalence of such influenza.

"Any opinion you have formed (or that you wish to modify) as to the mode of origin of introduction of the disease; and as to its method of spread.

"Have you observed among domestic animals any unusual complaint; and in what animals, and with what symptoms?

"Illustrations or observations as to the behaviour of any observed influenza, especially as to the intervals of attack in members of households, its dissemination amongst particular communities, and its incidence on particular localities."

There is not much to report concerning the epidemic in this country. That it has not been without a profound influence upon the mortality (from chest diseases) in London is evidenced by the returns of the past fortnight. But, fortunately, the disease itself seems to be dying out of the metropolis as fast as it came.

The death of the brother of the King of Italy, the Duke d'Aosta, from pneumonia supervening upon influenza, has added one more name to the list of illustrious victims of the disease. It is to be noted that the influenza has now invaded some of the regions where dengue has recently prevailed—a proof of the total distinctness of the two maladies. Thus we hear of it raging in Constantinople and Athens, whilst it has even invaded Algiers and Tunis, where the weather has been unusually cold and damp. In the New World it has spread to Mexico.

It is announced from Vienna that Dr. Jolles, a former pupil of Dr. R. Koch, had discovered the "influenza microbe," which he describes as resembling somewhat the pneumonococcus; and he says that he has detected this new organism in specimens of the Hochquellen water with which Vienna is supplied. It was also announced at the same time that Professor Weichselbaum (whose bacteriological work is well known) had also discovered the influenza bacillus. We must await more details before accepting these statements, which, as reported, do not carry conviction with them.

Our Liverpool correspondent writes:—"There have been many cases of influenza here, many practitioners having suffered from it as well as the general public. The majority of cases would appear to be those of ordinary influenza, though in a somewhat severe form, compelling the person attacked to stay in-doors or even to take to bed for at least a few days. Cases of the epidemic influenza, or, as it has been called, the Russian influenza, or *la grippe*, have also appeared, though these have been isolated rather than epidemic. Dr. Carter had a case at the Royal Southern Hospital, in which, in addition to the other peculiar symptoms, there were pains in the limbs, high temperature, severe headache, and pains in the back; the face was of a bluish colour. The sudden onset of the attack, making the term *grippe* very significant, has been very noticeable. But the cases would appear to have been but few compared with those in London and elsewhere. Whether the disease may yet appear here in epidemic form or not remains to be seen; but it may be remarked that the average Liverpool winter tells very severely upon all who are not acclimatised to it, and many of the more wealthy inhabitants avail themselves of the advantages of a winter residence in a milder climate."

THE HEALTH OF RUSSIA.

(FROM A CORRESPONDENT.)

(*Concluded from p. 165.*)

BEFORE proceeding to the consideration of factory legislation in Russia, a reference may be made to a matter of almost equal importance to the extreme scarcity of doctors already noticed—namely, the absence of medicine and the relatively small number of apothecaries' shops. The chief cause of the former fact is the high price of drugs, especially for such a poor country as Russia. Its serious bearing may be judged from the fact that intermittent fever affects every year millions of people in the south and south-east, especially in the Caucasus. The most efficient remedy known is, of course, quinine; but so expensive is the drug that even military hospitals are insufficiently supplied. How, then, should Cossacks, Kirgiz, &c., be provided? Under a system of monopoly. The number of apothecaries' shops is in some governments astonishingly small; in Archangel, with an area nearly three times that of the United Kingdom and a population of a third of a million, there were three. In 1887 there were in all 2670 shops, doing business to the extent of about two millions sterling to a population of about 110 millions.

Workmen and factories have but lately occupied the attention of Government. The Industrial Code of 1775 and the statute of 1806 exist little more than on paper. Among their contents are many provisions for the protection of the mining and industrial populations. Nominally in each government at the disposition of the governor are Government mechanical engineers, but neither are they in receipt of pay nor is there any provision for defraying the expenses of journeys of inspection they might undertake. For example, the inspection of a boiler by an engineer amounts to the receipt of 25 roubles from the manufacturer per boiler examined. And yet some engineers are so profitably employed they never appear in the governments committed to their charge. The governor, moreover, has no means of enforcing their attendance. The projected scheme for paid mechanics never ripened into law. Accidents in factories, mines, &c., are still regarded from the ancient standpoint, and settled by a reference to the will of God. But the results of occasional accidents are insignificant compared with the continuous influence of insanitary and unregulated industries, especially where the latter are, in their nature, injurious to the workmen. In the presence of grave evils, the question of who should be entrusted with the new duties of inspection excites more interest than the evils themselves. Shall it be the *zemstvo*, or local authority, a representative chosen by the workmen concerned, or the police?

The *zemstvo* has been mainly an economical institution, possessing no police functions; moreover, by the recent Tolstoi reform (?), it is reduced to a shadow. The new swarm of officials taking its place certainly will not be able to add this to their numerous impossible duties. The workmen hardly form a "class," in either the European or Russian sense, remaining as they do members of their several rural districts, to which they may return for part of the year or permanently. The non-corporate character of the operatives is a fatal objection in Russian eyes to their performing any functions such as the above. There remains the solution, to make the inspectors officials under a Government department—in effect, subordinated to the Ministry of Finance and the governors. The district inspectors for factories connected with mining industries acted under instructions made by "administrative order"—i.e., proceeding from the governor, which accordingly had not the full force of law, and were not recognised by the courts for the purpose of making defaulters answerable. This defect was set right. But the whole legislation on the subject of factory inspection is in the highest degree incomplete. A reconsideration of the industrial code has been long recognised as necessary, but never yet brought forward. As to the reports on the factories, workshops, mines, &c., they give but a faint idea of the condition of industry and of the industrial classes. The number of manufactories is unknown. It not infrequently happens that the existence of some is accidentally disclosed to the inspector on his rounds; others remain undiscovered, and this because they work periodically at unknown times or are unapproachable, or, if approached, there is no means of return. The difficulties of transit are so formidable that they must for many years yet to come have an important bearing on all such questions as inspection. In the Moscow *rayon* alone there are about 6500 establishments. Of this number, inspection reached in the year, for the most part once only, 460. Questions of hiring, which may be of daily occurrence, are required by law to be referred to the inspector. As to the employment of children, the manufacturers everywhere disclaim all knowledge of the law, or, at any rate, act to that effect. The result of the inspector's remonstrance is an immediate discharge of all children, and the closing of the schools. By this means they avoid further relations with the inspector. The children in many factories work, eat, sleep—and die?—in the workshop. How many hours they work under such a system may be imagined. The inspector of Kharkov reports: "Persons of humane sentiments with a university education, defending, *even in the press*, the law concerning children's labour, yet employ children, *as before*, twelve to fourteen hours a day." For the control of the evidence of manufacturers, extracts from baptismal registers in the case of children are required. The parish priests have established a tax of 2 to 3 roubles for the purpose; in Kharkov, 10! The said children receive no more than 2½ roubles a month. The total want of judgment, the absence of proportion in effort to effect to be produced in the application of theory to practice—so universally observable in Russia—are visible in the schemes for inspection. Inspectors who cannot as it is even cast eyes on every manufactory in their district once in forty years, clamour to have all the minor industrial workshops included in their task. It further appears that, as far as the law is concerned, the two cases are not clearly distinguished, just as it is a moot point with whom rests the licence for opening a new factory. There is a curious point in the history of Russian industries. The majority of modern manufactures have been imported bodily into Russia—skilled workmen, machinery, and all. But there exist representatives of the old domestic industries, called *kustarny*, which, unlike our own of the eighteenth and previous centuries, have not in general developed into great special industries of modern type. The products are for the most part bad, of which fact the whole world was advertised in Paris this year, and so notoriously so that the dictionaries all translate the word "trashy." As to the employment of children in factories, the advanced school are in favour of compulsory education, which would mean the exclusion of children from factories, and would probably entail further misery on the even now famished factory population.

The above sketch of the sanitary condition of Russia is taken mainly from the Medical Report (1886) and other official reports, and from the article on National Health in "Contemporary Russia" (cap. xix., pp. 152–183. 1890). The data on which to build are avowedly imperfect, but there can be no question that they all err very much in defect rather than in excess. As to the future, it is of course impossible to predict what success may attend the sanitary measures which the Government may see fit to employ. If these take the form merely of an increase in the number of clerks in a department in St. Petersburg, a very usual bureaucratic reform, no good will result. It is not improbable that in the presence of more pressing political needs no measures at all will be taken.

The unexpected appearance of the report of the Medical Department for the year 1887 so soon after that of 1886 enables me to make a few additions to this article on the Health of Russia. The new report presents an interesting contrast with those of former years in its markedly more sparing use of data and statistics of very questionable value. A distinction is drawn between data which are beyond doubt and those of more or less credibility. To the former category belong the natural increase of population (1½ per cent.), the considerable growth of infectious and contagious diseases, the lack of medical aid, &c. Almost all numerical data, on the other hand, are of very relative worth, and with each operation of percentages, division, &c., performed upon them, lose even their small initial value. And yet, notwithstanding the incompleteness of the figures, in many instances they even so exceed those in the various countries of Europe. Thus the infectious diseases show a greater mortality in Russia than in Holland, England, Italy, Belgium, and Prussia. Most diseases for the year 1887, whether infectious, endemic, or parasitic, show an increase on previous years, which no doubt bears out the view

deduced from earlier statistics that registration is becoming more perfect. Leprosy, for example, was observed in 65 districts, and there were registered 615 cases in the year.

The excessive mortality in Russia forms the subject of an interesting monograph by N. Ekk. According to this authority, in Russia there die every year in 1000 9 individuals more than among the same number of Germans, 12 more as compared with France, 15 with England, 18 with Sweden and Denmark, and 19 more compared with Norway. An excess mortality of 15 means a loss of 1,650,000 lives to the State in one year. And this mainly due to neglect of the most elementary sanitary precautions.

That other losses besides those appearing in tables of mortality are incurred may be seen from such facts as the extraordinary prevalence of blindness. According to the statistics in the census of 1886 in fifty governments of Russia there were 21 blind persons to 10,000 inhabitants, or almost five times more than in Holland, four times more than in Austria and the United States, and three times more than in Saxony, Denmark, and Switzerland.

A remarkable fact noticed in the report is the widely-spread secret trade in poisonous and strongly-acting drugs, which is as prevalent and as little amenable to police supervision as in former years. In the course of the year the authorities were made acquainted with 27,107 cases of poisoning.

Sanitary inspection now is almost coextensive with the territorial limits of the empire, but except when supported by considerable monetary outlay is still extremely ineffective.

Correspondence.

"Audi alteram partem."

CONGESTION OF THE LUNGS.

To the Editors of THE LANCET.

SIRS,—Can any of your readers inform me why congestion of the lungs has become the privileged complaint of the upper and pay classes, whilst inflammation of the lungs has been degraded to the wards of the hospital? At least I should much like to make the acquaintance of the physician who would present to his class of students a patient with a temperature of 104° and congestion of one lung; both the doctor and patient would be curiosities. But when the former commences his private rounds he meets with plenty of such cases, some unfortunately proving fatal. What is the reason of this? He would not pretend that the difference depended on the payment of a fee, but he might answer that the word inflammation has a meaning of great horror to the intelligent classes. I have been informed that such is the fact, for on more than one occasion, when about to use the expression, I have been hushed and begged not to use that word as if it implied something as dreadful as cancer. If such feeling ever existed, it can do so longer, for hundreds of people are now dying around us of congestion of the lungs, but very few of inflammation. If, as others say, the term "congestion" is used as easier of comprehension by the public mind, it seems strange that a disease like pneumonia—a demonstrable reality in all its stages—should be unintelligible, whilst a purely imaginary complaint should be readily understood. If no better reasons can be given than those I have named in order to miscall a disease, let us hope, when a patient has pneumonia, in the name of pathology, of honesty, and of common sense, that the term congestion of the lungs may be discarded.

I am, Sirs, your obedient servant,

Grosvenor-street, Jan. 18th, 1890. SAMUEL WILKS.

THE CHLOROFORM COMMISSION.

To the Editors of THE LANCET.

SIRS,—Having followed the proceedings of the Hyderabad Chloroform Commission with much interest from the beginning, I trust you will allow me space to draw attention to what, if its dicta be accepted in their entirety, must be an important outcome of its conclusions.

The final conclusion of the Commission is that chloroform may be administered *in any case* with ease and *absolute safety* (the italics are mine) if its directions for administration be adhered to. With this conclusion I entirely disagree, as I know from my own personal experience that people do exist who cannot tolerate chloroform as an anæsthetic, no matter how it is administered, and yet, unfortunately, we cannot detect anything abnormal about them until it is being given, when either death or a condition very analogous to it ensues. I will relate the history of two such cases later on. Now, suppose a death were to occur from chloroform after the promulgation of this report, what would be the result to the administrator? Would a coroner's jury find death from misadventure or would the verdict be one of manslaughter? I know that I should be very sorry to administer chloroform if I knew I was liable to be found guilty of manslaughter should the patient die under it, and I fancy that many other doctors would say the same. For the last fourteen years I have administered chloroform precisely as the Commission recommends, and, although I never lost a patient under it, still I went so near doing so twice that my experience may be interesting. About twelve years ago, when civil surgeon of a very large district in India, I had a great deal of surgery, and so great was the crush of people coming daily that at last it became almost impossible to get through the work. To enable me to cope with it I used to make my assistant surgeon give chloroform to one patient while I went on examining others, in order to pick out those cases that were suitable for operation. I worked in a verandah only a few yards from the door of the operating-room, and one day my assistant surgeon rushed out to tell me that the patient on the table to whom he was administering chloroform was dead. In a moment I reached the room, and at once commenced trying to resuscitate the patient, and I succeeded after about twenty minutes of the hardest work I ever had. My assistant surgeon assured me that he had given very little chloroform, when suddenly the man stopped breathing, and at once passed into the alarming condition in which I found him. He (my assistant) was a very capable man, of great experience in giving chloroform, so that I had no reason to doubt his word. Moreover, he had helped me to give chloroform hundreds of times, and knew how to give it just as well as I did. Some two years afterwards I was giving chloroform to an old woman, and she had only taken a few whiffs, not enough to harm an infant of a week old, when suddenly, without the least previous warning, she ceased breathing and became to all appearances dead, and it took me all I knew to get her round again. There was nothing whatever in her previous condition to lead one to suppose that she could not tolerate choloroform, and I know that no one could have given it more carefully than I did. I say, therefore, that one certainly cannot give chloroform with absolute safety in every case.

I do not write this to find fault with the general findings of the Commission. On the contrary, I know from my own experience that they are absolutely true, and I rejoice that at last the truth is known about chloroform, and that it is to a man of my own service the credit is due for this crowning victory in its favour. I only say that I am not satisfied as to its absolute safety in every case, and I shall be glad to hear whether my experience of it can be borne out by others.

I am, Sirs, yours faithfully,

A. DEANE, M.D.,

Croydon, Jan. 20th, 1890. Surgeon-Major, Bengal Med. Service.

CHLOROFORM A SAFE ANÆSTHETIC.

To the Editors of THE LANCET.

SIRS,—The results of the work of the Hyderabad Commissions, important as far as they go, can only be considered as final on one division of the subject. Where the nervous system is an important factor, the difference between the highly organised cerebro-spinal system of man as compared with animals is not likely to be overlooked. Sometimes the results of clinical experience may disagree with those of physiological experiment. In such cases practical men are apt to prefer the former. But even in clinical work sources of error exist. There are three such which ought to be kept in view:—1. That those in many respects most qualified to judge in the question—viz., experts, anæsthetists by profession—are from their very position apt to have a distinct bias; for of the essence of the controversy is the contention, on the one hand, that average ability,

great care, and moderate experience are sufficient for the safe administration of chloroform, without any special apparatus. Opposed to this is the reiterated belief, supported of course by the united body of professional anæsthetists, that both experts and apparatus are required, whether for chloroform or ether. 2. In favour of the use of chloroform as a routine anæsthetic is the weight of conservatism, including the convenience of administration of the drug. 3. In cases of death under administration, there is a natural tendency for even an upright and honest man to seek for causes of death outside the obvious possibility of accidental asphyxia from over-dosage or failure in resuscitation. A question in which such conflicting interests are involved can only be settled by facts. The Hyderabad Commission has contributed its quota. When chloroform was first introduced its use was attended for a long time by a wonderful freedom from mishaps. Of late years deaths have increased, and *pari passu* a certain degree of alarm has arisen. But are the deaths the cause of the alarm, or is the alarm the cause of some of the deaths? The latter view is by no means untenable. People may die of pure fright or of ordinary syncope. The state of anæsthesia may increase the possibility of such an untoward occurrence, which may take place under even nitrous oxide.[1] If this be so, then a certain responsibility rests on all who foster such an alarm by unguardedly condemning the use of a popular anæsthetic. But, after all, the crucial question is—What is the mortality in the practice of successful operators? This is the test which we apply to all important surgical procedures. By it we eliminate many fallacies.

Now, with regard to the practice of the Kashmir Mission Hospital, I may state that there has never been a death under chloroform. Since 1877, the number of surgical operations performed has been 13,275. In connexion with these, at the lowest estimate, chloroform has been administered more than 5000 times. Many surgeons in Great Britain must have had vastly greater experience. If it be possible to accumulate facts from such sources, we shall soon be in a position to judge as to the intrinsic mortality of this, in one sense, the most important operation in surgery.—I am, Sirs, yours faithfully,

ERNEST F. NEVE, M.D., F.R.C.S. Ed.

Kashmir, Dec. 13th, 1889.

THE ABOLITION OF WAGE LIMIT IN THE MANCHESTER PROVIDENT DISPENSARIES.

To the Editors of THE LANCET.

SIRS,—As considerable discussion has taken place as to how the "wage limit" rule was removed, and as no satisfactory answer has yet been given, I wish to state that originally the rule for admission to the above was:—"The members shall be artisans and others in receipt of weekly wages whose average family earnings do not exceed 35s. per week, and who are not in receipt of Poor-law relief" (extract from Fourth Annual Report, 1878). On Jan. 19th, 1882, the above dispensaries, with the Manchester Medico-Ethical Association, formed a joint committee, and recommended the adoption of the following:—"It is the unanimous feeling of the committee that a wage limit is not satisfactory, and must lead to suspicion and jealousy among the medical men living in the neighbourhood of the dispensaries, while the inquisitorial investigation of their circumstances will naturally be resented by the working classes. Your committee, therefore, think that the 'wage limit' should be done away with, and that a sufficient check against the admission of those above the class of the really poor will be provided in part by making the admissions subject to the approval of the managing committee, one of whose functions should be to decide on the admission and removal of the members, and further by reference direct to the District Provident Society by medical officers and others of such cases as in their opinion ought not to have been admitted." This was adopted at the adjourned annual general meeting of the dispensaries held in April, 1882. It is sincerely to be hoped that the Medico-Ethical Society will soon correct this terrible blunder. The fact is, that every person who seeks for admission into the Provident Dispensary should have his social circumstances inquired into by the inspectors of the Charity Organisation Society, just as the hospital patients are looked after. What is the good in asking the doctors, or a person paid a commission on the number of members secured, to examine into the social circumstances of applicants? A provident dispensary is not a burial club.

The Manchester Provident Dispensaries should (*a*) fix the wage limit; (*b*) secure the services of the Charity Organisation Society in approving of applicants for membership; (*c*) have a cash fee department, so as to take ineligible cases of the hospitals *at once;* (*d*) exclude the rule referring to midwives; (*e*) refuse to allow provident dispensary patients to be foisted on to the hospitals when the dispensary doctor is tired of them; (*f*) and exclude the rule which says that no matter how large a family, not more than twopence per week shall be charged for them. Really, if the Manchester business men wish to pose as philanthropists, they should do so in the right way, and not by passing rules which benefit their workers, save their own pockets, and throw all the hard work on the medical practitioners. The sooner the medical staff at Manchester publicly assert their self-respect and determine to bring matters right, the sooner will they free themselves of ridicule, and cease to be the laughing-stock of business men, who only trade on their want of harmony and unbusinesslike actions.

The comical feature in the above resolution is the reference to the "suspicion and jealousy of medical men." This is, no doubt, a good string to play upon, as with such kept up little good will be accomplished. The "inquisitorial investigation" has been a good bogey for many years, but is now worn out, as it is well known that the working classes fix their rate of wages by trades unions, and arrange for advance of wages according to the price fluctuating. The tax authorities also by "inquisitorial investigation" fix the tax on house property, poor rate, income tax, and all such. Surely they might let the "inquisitorial investigation" scare die.—I am, Sirs, yours faithfully,

Liverpool, Jan. 1890. R. R. RENTOUL.

THE UTILISATION OF COUNTY HOSPITALS AND ASYLUMS FOR TEACHING PURPOSES.

To the Editors of THE LANCET.

SIRS,—It has often struck me as rather a strange thing that reading parties of medical students are not formed as they are in the literary departments of certain universities, and that, instead of medical students remaining during summer in the large cities in which most of our medical schools are situated, they do not migrate to some pleasantly situated smaller town where rural enjoyments are within reach, but where also facilities for study and hospital attendance are accessible. Many students come from abroad to study in the United Kingdom, and are without home ties during their student life. Such a plan as I suggest would be both suitable and pleasant for them, as well as for many students whose means could afford it, and to whom study in company might produce, from emulation, better results than solitary work. One or two summers might with great advantage be thus spent, a young graduate or advanced student acting as reading tutor, in charge of the party. The party, made up chiefly of third-year men, could attend the provincial hospital and the lunatic asylum if convenient. Hospital attendance and clinical instruction could be easily arranged for, and would count in the medical course. The hospitals at Carlisle, Chester, Ipswich, Worcester, Bath, and Brighton each accommodate over 100 patients, and attendance at them would count in the curriculum; possibly vaccination and practical midwifery could also be arranged for. In the large medical schools it is not easy to get dresserships, and in many of the hospitals patients may find themselves rather over-examined by students. If a party of a dozen students took up their residence near a country town which afforded the facilities for clinical teaching such as I have indicated, they might really acquire in the time more practical knowledge than at a large hospital overcrowded by students. A complete change, healthful amusement, and recreation might thus be combined with a systematic supervised course of study, which would count in the medical curriculum, and which probably could be obtained at less cost than the usual residence at the medical school.

I am, Sirs, yours truly,

Carlisle, Jan. 11th, 1890. J. A. CAMPBELL, M.D.

[1] THE LANCET, vol. ii., 1889, p. 804.

LEAD POISONING FROM SERVICE PIPES.

To the Editors of THE LANCET.

SIRS,—For some time past the subject of contamination of drinking water by lead has been a burning question, and I must say that I have been struck, and even shocked, at the dogmatic tone assumed by some chemists when speaking of the means for preventing this scourge by chemically treating the water either at its source or in the storage reservoirs. Personally, I regard all such attempts as worse than useless, because they lull the public for a time into a fancied security, from which it awakes to find matters as bad, or worse, than they were before anything was done. Presuming the water to be free from lead before entering the service piping, I believe that nothing short of supplying it through service piping containing no lead will be found of any permanent use, and the article on this subject in THE LANCET of Jan. 18th is one worthy of the careful attention of the whole profession. The difficulty at the present time is to know how to cope with this great question. To call upon property owners to substitute iron service pipes for the lead ones would be a serious and heavy matter for many of them, and to call upon local authorities to do the same thing would be certain to meet with great opposition. What I would suggest to meet the present emergency is that in each street, in an accessible position, there be placed an iron stand with tap connected to the water main by iron piping, to which the inhabitants could come to draw their water for drinking and cooking purposes. The majority of people in our northern towns are now fully aware of the dangers of water contamination by lead, and there are many sufferers who endure agonies, not knowing where to get a pure water-supply. The foregoing plan would not be very expensive, neither should it be a wasteful one, if properly constructed taps (closing automatically) were used.

I am, Sirs, yours obediently,

ALFRED SWANN, M.D.,
Medical Officer of Health.

Batley, Jan. 19th, 1890.

THE RAILWAY SERVANTS' EYESIGHT QUESTION.

To the Editors of THE LANCET.

SIRS,—Your very interesting article, page 91, has dealt very fully indeed with this important subject, and I am glad to observe that, in your opinion, the test should be made by medical experts, and not by foremen and inspectors. The construction of the eye is a matter about which ordinary railway foremen know absolutely nothing; and to allow them to say if a man is safe or unsafe to drive an engine is absurd. In order to show how little these foremen understand the tests, or how unfairly they apply them, it is only necessary to refer to actual facts. I have instances before me of men being placed at eighteen and twenty feet from the dots, instead of fifteen feet; of the sun shining fully upon the face of the man being tested, or fully upon the card; instances where a man has had to hold his hand over one eye for a long period of three or four minutes; testing with the Holmgren wools by gaslight, and requiring the names of at least twenty-five wools to be correctly given; waking a man up and sending for him to come to be tested after only one and a half hour's sleep following a twenty-four hours' turn of duty.

It is stated upon the test-card that the position of the card is to be moved, and there are some foremen who conclude they are to hold the card in their hands and slowly move it during the test. There are also many cases of the test-card being placed in the foreman's office window and the men required to stand outside and look through the glass. Upon pp. 106–107 Mr. F. B. Judge Baldwin illustrates his form of testing apparatus, which he uses, he tells us, upon the Midland Railway. That gentleman seems to think 288 yards enough for the vision of a railway servant; on the other hand, I urge that a railway man must be able to see a signal at a mile off. The idea that it is "quite easy to pull up any train in 288 yards" is perfectly absurd. Trains running upon falling gradients, as they do daily, at seventy to seventy-five miles an hour, upon a "greasy" day, even with continuous brakes, could not be pulled up in 288 yards, and without continuous brakes they would run from a half to three-quarters of a mile. Express goods trains upon falling gradients, with ordinary hand brakes and greasy rails, often run over a mile. Then, again, the fact that a man can see $\frac{1}{12}$ inch diameter at four yards is no proof that he can see a signal at the required distance.

It is in the interests of the passengers, the companies, and the servants that every man who has to work by signals shall be able to see those signals, and the only possible way to prove if a man can see signals is to take him upon the railway and try him practically, both by night and by day. If he can pass that test, I should say he is efficient; but if a man cannot see signals, he must at once give up engine-driving.

I am, Sirs, yours truly,

CLEMENT E. STRETTON, C.E.,
Consulting Engineer to the Associated Society of Engine Drivers and Firemen.

Leicester, Jan. 13th, 1890.

THE UNIVERSITY OF LONDON.

To the Editors of THE LANCET.

SIRS,—I should esteem it a favour if you will allow me a short space in your journal to say that a protest against the proposed change in the University of London has been prepared, and is now in course of signature by the graduates and undergraduates at the various medical schools. Anyone wishing for a copy for signature can have one on application to me.

Yours faithfully,

St. Bartholomew's Hospital, Jan. 20th, 1890. H. J. WARING.

PUBLIC HEALTH SERVICE.

To the Editors of THE LANCET.

SIRS,—THE LANCET dated Jan. 4th contains an article on the Public Health Service, with which I entirely agree. There is no doubt that appointments by the guardians to small sanitary districts at a low rate of remuneration are inimical to good work. After thirty-four years' experience, partly on an arrangement which admitted of attendance at my own discretion, and partly as now, when I have to give up a certain portion of my time daily, and am debarred from private medical practice, I am certain that the latter is the proper and only satisfactory means of conducting the sanitary work of a large district.

I am, Sirs, yours faithfully,

Hackney, Jan. 16th, 1890. JOHN W. TRIPE.

THE EPIDEMIC OF INFLUENZA.

To the Editors of THE LANCET.

SIRS,—In reference to the question as to the means of propagation of the epidemic prevalence of influenza, I can produce proof that the disease is propagated both by infection and through the atmosphere (wave theory). I will merely lay the following undoubted facts before your inquiring correspondents.

1. *Proof of infectious source.*—Having had under my care a very complicated case of this disease, and the patient being supposed to be in a dying state, her brother was telegraphed for, and arrived in the sick room at 1 P.M. on Jan. 13th. As all the other members of the family were either tired or ill, I put this man in charge of his sister. The same evening, late, I visited my patient, whom I found much better, and her brother was then still attending in good health. Next morning (14th) at 7 o'clock I again attended, and found my patient almost convalescent, but her brother was not there. Asking where he was, I was shown into the next room. He was in bed covered with blankets &c., and could not get warm. He had all the symptoms of the disease. He stated that he first noted the "shivering" at 2 A.M. on the 14th—that is, thirteen hours after his arrival in the sick-room. This case is, I think, important, as it bears not only upon the question of the infectiousness of the disease, but also proves the shortness of the incubation period. This man asserts that in his country village in Bulgaria, whence he came, there did not exist any disease, and neither could he have caught the disease at any village on his route, as he stopped at none.

2. *Wave theory.*—That the disease is carried through the air I feel certain. The following fact I can vouch for:—An Armenian arrived here from a village fourteen hours distant to consult me regarding a brother who was suffering from phthisis. In course of conversation I asked him if there were any cases of the epidemic in his village. He replied, "Oh yes, nearly all have been in bed with the same complaint you have here, and many have died." I then inquired

if his village had much communication with other places where the disease already existed. He replied, "Certainly not. At this season there is no need of communication, and I am sure I am the only individual who has left the village for some weeks." He also states that since the disease first appeared in his village, now two weeks since, no one has come to or gone from there.

I think the above facts are of value at the present time, especially as many writers will now be looking out for well-authenticated facts regarding this present epidemic. It behoves all who are now working against the malady to give publicity to whatever incidents in the epidemic may appear singular or interesting. It is in this sense that I contribute to your journal my mite of information. In conclusion, I may state that all the villages in the Danbrugher are infected, and intercommunication of the villagers at this season is almost *nil*. Here, again, is another point in favour of air infection. I therefore confess to being a believer in both theories of transmission of the disease.

I am, Sirs, yours faithfully,
A. IRWIN BOLTON, M.B., A.B., T.C.D.

Kustendjie, January, 1890.

To the Editors of THE LANCET.

SIRS,—The accompanying extract from a letter recently received by me from Dr. J. C. Phillippo of Kingston, Jamaica, and dated Dec. 17th, 1889, may be of interest to some of your readers.

"I see that there is an epidemic of influenza through Europe. Strange to say, we have been suffering from it here for more than a month. It is characterised by an initial fever of from twelve hours to four or five days' duration, catarrh, cough, and pain in the chest, lasting for two or three weeks sometimes; the worst cases turning into laryngitis, bronchitis, and pneumonia. I understand that it is also prevalent in America. I characterised it on the 6th inst. at our branch meeting as an epidemic influenza."

I am, Sirs, yours &c.,
Nottingham-place, W., Jan. 20th, 1890. PHIN. S. ABRAHAM.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Newcastle: Deaths of Mr. J. Dobson and Mr. W. Dodd.

DURING the last week the general topic of conversation in medical circles has been the recent deaths in Newcastle of two of its well-known and highly respected citizens, Mr. Alderman John Dobson and Mr. William Dodd, both of whom were intimately connected with the profession. Mr. Dobson, in fact, served his time in the old-fashioned way to Mr. Henzell of Percy-street, a well-known surgeon, obtaining at the same time the freedom of the town, being a member of the Company of Barber Surgeons, and was raised to the rank of senior warder. Circumstances, however, induced Mr. Dobson to abandon the profession and commence business as a chemist, in which he was highly successful, taking over an old-established business of Mr. Garnett, a gentleman who lived to a great age in Newcastle, and was well known for his scientific attainments and musical ability, not only as a performer, but as a composer of sacred music for the organ. Mr. Dobson, who was possessed of a genial nature, seemed always at his ease when in the company of medical practitioners, and could listen to and appreciate the history of a rare case with great interest and attention. The deceased, who was in his seventy-second year, suffered for some time from the effects of paraplegia, and in his last seizure, which ended fatally last Thursday, he was seen by Dr. Gibb in consultation with his family medical adviser and old friend, Mr. J. A. Angus, who from the first regarded his case as hopeless. Mr. Dobson has left a widow, but no children. His remains were followed to their last resting place by the mayor and corporation officials, and by a large concourse of citizens, feeling that they were paying a tribute of respect to the memory of "a north country worthy" and to "one of Nature's gentlemen." Mr. William Dodd, who also died last week, at the advanced age of seventy-nine, was well known as an antiquarian and as a lover and collector of books; but he was mostly known to the profession in the North as the most capable and obliging librarian at the Royal Infirmary, which post he held for a generation. He was also intimately connected with the Newcastle Children's Hospital.

Health of Northern Seaside Resorts.

At Whitby, Dr. Tinley, medical officer of health, has lately presented his report, showing a death-rate of only 3·6 for the quarter. He said there was a total absence of deaths from zymotic disease, and if the deaths from accidents and senile decay were deducted, the rate of mortality was still more favourable. Redcar also shows a very satisfactory state of health. The rate of mortality remains extremely low; in fact, there has been only one burial at the cemetery—a child—since last October. The air of Redcar is very dry, and it has a supply of excellent drinking water. Of course, at this time of year the population will be at its smallest. Still, I believe the residents number 2500.

Sunderland: Death of Dr. W. H. Dixon.

I regret to notice the death of Dr. W. H. Dixon of Sunderland, which took place at his residence in Frederick-street, on Saturday, Jan. 18th, at the age of sixty. He was an M.D. Edin., M.R.C.S., and L.S.A., and formerly house surgeon to the Sunderland Infirmary, but at the time of his death he was consulting physician to that institution, and to the Monkwearmouth Dispensary, also Admiralty surgeon for the Port of Sunderland. Dr. Dixon is much regretted in the north, while in Sunderland, apart from his professional ability, he was held in high esteem as a citizen and on account of his high scientific attainments and culture. Dr. Dixon was a widower, and I believe has left one grown-up son alone to mourn his loss. The cause of his death was cerebral disease, inducing two distinct attacks of paraplegia.—I hear that the influenza has appeared in an epidemic form at Sunderland and some of the adjacent towns. All over the north-eastern districts we have experienced great variation of temperature during the past week, warm, almost sultry days, being succeeded rapidly by high winds and frost.

Newcastle-upon-Tyne, Jan. 22nd.

EDINBURGH.

(FROM OUR OWN CORRESPONDENT.)

Professor Hamilton on the Nervous System.

LAST WEEK Professor Hamilton of Aberdeen University gave a most interesting lecture on the "Nervous System, its Origin and Functions," to the members of the Edinburgh Philosophical Institution. He gave a general account of the nervous system, and then went at some length into its mode of origin. Sir Richard Owen's speculations on the position of the original mouth, on the crown of the head, and De Graaf's unpaired eye, were freely discussed. Gaskel's conclusion—that the cavity in the brain had in reality been a stomach in the original invertebrate animal—Dr. Hamilton considered was a rational one; and his suggestion, founded on many facts, and one which seemed very feasible, was that the cavity in the brain of the vertebrate was the remains of the crustacean head-stomach, and that the canal in the spinal cord was the remaining crustacean part of the alimentary canal. The neurenteric canal, which had hitherto been such a puzzle to morphologists and embryologists, thus came to be a most important channel from the development point of view. In conclusion, he said it would appear, from what he had brought before them, that our complex nervous system originated in a number of peripheral sense organs situated on the surface; that these sense organs gradually sank deeply into the body, and became modified into the nerve cells and fibres; that the nervous system then assumed the form of a ring, with the alimentary canal passing through it; that one set of brain-like ganglia was placed on the ring above and one below the gullet, and that this single ring, with these two ganglia, formed the type of architecture in the brain of all the higher vertebrates, although the part of the original alimentary canal which the ring surrounded had become obsolete. He then gave a *résumé* of recent embryological researches on the cerebrum and its functions, and traced its gradual evolution from the lowest to the highest forms.

General Council of the University of Edinburgh.

On Thursday, the 23rd inst., a special meeting of the General Council is to be held at 3 o'clock, at which, amongst

other matters, the following business is to be brought up:—Declaration by the Scottish Universities Commission, fixing the quorum of the General Council. Special Report of Business Committee, embodying reports and resolutions of the General Council in recent years on the following subjects—viz.: Proposed General Universities Court; graduation in arts; other subjects affecting the well-being and prosperity of the University in general, and of the Council, and of the whole body of graduates and members in particular; extra-mural teaching; reciprocal use of the University Libraries by members of the General Councils of the other Scottish Universities; medical qualification for physicians in the Royal Infirmary and other charitable institutions; publicity in oral professional examinations. As this meeting is convened under the powers conferred by the new Act, and as the business is of vital importance to the University, it is expected that there will be a very large meeting.

The Royal Infirmary.

It is a custom of the contributors to the Edinburgh Royal Infirmary to refer the report of the managers to a committee, and then to adjourn the meeting to a future date. This week the adjourned meeting has been held, and the report of the committee was submitted. There was little new matter of general interest brought forward, except that a medical member of the committee expressed his anxiety that they should bring under the notice of the managers the propriety of giving additional facilities for clinical instruction to the students. The committee did not feel themselves able to express an opinion on the matter, but they agreed to forward a memorandum to the managers. This is a matter of very great importance to the medical school, as it is at present felt that the opportunities for clinical instruction in such a large institution as the Royal Infirmary are far too limited, and that the students do not obtain all the teaching that they might without interfering with the comforts and feelings of the patients. With the great increase in the number of students in Edinburgh, this matter must attract attention and call for the most careful consideration of those interested in maintaining the high level of the medical and surgical teaching in our University and extra-mural schools.

The Influenza.

Five deaths were registered in Edinburgh last week as having resulted from influenza. Three of these occurred in Morningside Asylum, and two in the city. In the Morningside Asylum, out of a total population of 1160, 25 per cent. have suffered from influenza. Dr. Clouston thinks that there are four types of the disease, but that the respiratory type is by far the most fatal. There have been five fatal cases in old or weak individuals since the outbreak, all of whom died from a form of bronchitis. In one of the evening papers it is stated that no fewer than 14,000 patients have been suffering from influenza. This is surely an exaggeration. The Council of the College of Physicians have taken up the matter, and have offered to appoint a committee to investigate scientifically the influenza epidemic if they are allowed to have the use of a couple of wards in which observations on influenza patients may be made. The Public Health Committee have agreed to place the Canongate Hospital at the disposal of such a committee, who may be expected to report as soon as a sufficient number of cases has been studied.

The Health of Edinburgh.

Last week the mortality was 169, giving the extraordinary death-rate of 32 per 1000, of which nearly one-half was due to diseases of the chest; 32 of the deaths being accounted for by zymotic diseases. The death-rate last month was also very high, being 24·05 per 1000 of the estimated population. Of these, 18·02 per 1000 occurred in the New Town, 35·11 per 1000 in the Old Town, and 14·71 per 1000 in the southern suburbs. The death-rate from diseases of the chest during this period amounted to 37 per cent. of the whole; 8·97 per cent. were due to debility and old age; and zymotic diseases proved fatal in 17·57 per cent. of the total. For the year ending Dec. 31st the total number of deaths recorded in the city was 4415, giving an average death-rate of 16·54 per 1000, the average death-rate for the five previous years being 17·79 per 1000. From the same report it is gathered that during the month of December there were 1701 cases of infectious diseases, of which 1467 were cases of measles, 139 of scarlatina, 61 of diphtheria, 32 of typhoid, and 2 of typhus. During the year, 1294 patients were admitted to the City Hospital; of these, 1087 were discharged and 89 (or 6·42 per cent.) died. The details of the cases were as follows: typhus, 46 admitted, 8 deaths; typhoid, 154 admitted, 15 deaths; diphtheria, 107 admitted, 31 deaths; scarlatina, 400 admitted, 10 deaths; measles, 231 admitted, 15 deaths; whooping-cough, 37 admitted, 3 deaths; erysipelas, 178 admitted, 5 deaths; in quarantine, 141 admitted, 2 deaths.

The Royal Society.

At the meeting of the Royal Society, held last night, Sir Wm. Thomson, the President, communicated some notes on Electrostatic Stress; Professor C. Michie-Smith exhibited a number of photographs of the great volcanic eruption at Bandaisan, in Japan, of July 15th, 1888; Professor Steddle recorded a curious set of Five Fog Bows, observed at Portree in the Island of Skye; and Dr. John Berry Haycraft read a paper on Voluntary Muscular Contraction and the Heart and Muscle Sounds. He pointed out that the ordinary and accepted idea was that during a muscular contraction the nervous system is firing a series of impulses into the muscle like shots rapidly fired from a revolver. This might be explained by a fact recently discovered by himself—namely, that during a contraction a muscle is never completely coördinated within itself. The parts—fasciculi—are moving aperiodically, and these aperiodic movements compound themselves with the periods, the recording apparatus, and give results which have been erroneously interpreted.

Edinburgh, Jan. 21st.

DUBLIN.

(FROM OUR OWN CORRESPONDENT.)

Illness of Dr. Henry Fitz Gibbon.

As mentioned last week, this gentleman lies seriously ill at Paris. Dr. Magee Finny, his colleague at the City of Dublin Hospital, who specially visited him in Paris, has returned to Dublin. A telegram was received on Monday evening to the effect that a decided improvement had taken place in Dr. Fitz Gibbon's condition, and his many friends trust he will soon recover sufficiently to be able to return to his home in Dublin.

Health of Dublin for December.

During the four weeks ending Dec. 28th last, the deaths within the municipal area amounted to 644, being equal to 33·19 per 1000. Zymotic diseases caused 71 deaths, and, as compared with the previous month, the mortality caused by measles and whooping-cough was nearly doubled. The death-rate was much above that of the corresponding month of 1888, the high mortality being principally due to diseases of the respiratory organs. The zymotic death-rate was very slightly in excess of that of December, 1888, and was much below the mean rate for the corresponding period of the previous ten years.

Mercer's Hospital, Dublin.

A vacancy for a physician for this institution will, it is expected, be shortly filled up. Applications for the post were to be sent in by the 7th inst., and afterwards postponed to the 20th inst., so it is probable that an election may take place this week should candidates come forward. The hospital, with its recent addition, requires of necessity a second physician, as the number of medical cases must be considerable in an institution situated in such a central position.

Lunatic Asylums Department.

It is rumoured that Dr. G. Plunkett O'Farrell, medical commissioner of the Irish Prisons Board, will succeed Dr. Hatchell as inspector of lunatic asylums in Ireland, while Dr. O'Farrell's appointment will be filled by the selection of Dr. Woodhouse, a medical inspector of the Local Government Board. Further, that should Dr. Nugent, inspector of lunatic asylums, retire, he will be succeeded by Dr. Maziere Courtenay, medical superintendent of the Limerick District Lunatic Asylum.

Castletown Dispensary.

An election for a medical officer to Castletown Dispensary took place on Saturday, Jan. 18th, and created a considerable amount of interest, the candidates being Dr. Dunne and Dr. Hogan. Dr. Dunne was elected by eleven votes against two.

A ball in aid of the funds of the Dublin Orthopædic

Hospital will take place on Monday, Feb. 3rd. It will be held under the patronage of the Lord-Lieutenant and Countess of Zetland, the Lord Mayor and Lady Mayoress, and Prince and Princess Edward of Saxe-Weimar.

Dublin, Jan. 21st.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

The Academy of Medicine.

AT the meeting of the Academy of Medicine last week Dr. Paul Berger exhibited a child of eight months from whom he had successfully removed an occipital encephalocele. Dr. Péan presented a woman, thirty-two years of age, on whom he had practised ablation of all the bones of the face for osteo-fibromata, following on dental heterotopia. The result was most remarkable, and this woman, deprived of the osseous frame of the face, performs all the facial movements, eats, and speaks, by means of apparatus which were manufactured for her by two professors of prosthesis at the Dental School of Paris.

Tuberculosis.

The discussion on the prophylaxy of tuberculosis was then resumed, when Dr. Lancereaux, in a remarkable discourse, endeavoured to show that Koch's bacillus is not sufficient to explain the development of tuberculosis without a certain predisposition in the organism. This predisposition is met with in persons crowded together in badly ventilated small rooms, and in those addicted to the abuse of alcoholic drinks. He did not think that it was in the province of the Academy to concert measures against these two evils, as the State alone could produce the necessary modifications in the habits of the people, and improve the sanitary condition of the city by widening the streets, and thus giving its inhabitants the benefit of more sunlight and fresh air. Dr. Jaccoud followed, and stated that, whilst approving of the propositions of the Commission, he could not vote for them, as their substance had long been known, and he did not think that anything could be gained by again bringing them before the public. It would be sufficient and more rational to refer them to the profession, for which purpose the medical publications were amply sufficient.

The Influenza.

Judging from the official reports, and according to the statements made by practitioners in general, the course of the epidemic of influenza in Paris is near its end, although in the provinces it is still raging with some vigour. The lycées and schools which were closed for a time have been reopened, and since the return of the pupils to them about a week ago no fresh case has occurred. In the hospitals the wards are not so crowded, and the demands for admission not greater than the average of the corresponding period of other years. The public establishments which have been more or less disorganised have resumed their work, and Paris is returning to its former state, so that it may now be said that the influenza is already a thing of the past. In a note by Dr. Landolt, the well-known ophthalmologist, the author draws attention to certain ocular manifestations of the recent epidemic which he had observed, and which may be looked upon as complications of the disease. The most frequent of these was conjunctivitis of a particular form, characterised by deep redness and tumefaction of the ocular mucous membrane, with more or less abundant secretion, occurring generally in the stage of convalescence. Sometimes he observed œdema of the lids without any irritating phenomena. In certain cases the palpebral tissue suppurated, and the abscess sometimes extended even to the depths of the orbit. These different complications were of a benign character, and when taken in time were cured without any accident. The aurists have also observed certain complications of the ear which were manifestly due to the influenza. These consisted of suppuration of the tympanum, generally bilateral. Dr. Gellé, writing on this subject, remarks that he had rarely observed such a large number of cases similarly affected in so short a time. In a large proportion of cases the aural manifestations of the *grippe* were limited to the drum of the ear. In a note by Dr. Loewenberg, the author states that from Dec. 23rd, 1889, to Jan. 5th, 1890, he had observed twenty cases of acute otitis of the middle ear clearly due to the influenza, as during the corresponding periods of the preceding three years he had observed only one case of otitis of the middle ear. The cases under notice presented the usual symptoms of intense pain ceasing at the moment of the perforation of the tympanum, discharge of pus, and almost absolute deafness. These accidents are remarkable for the rapidity of their evolution, terminating in a complete cure in from ten to twelve days.

The Death of Dr. Damaschino.

A very melancholy circumstance has taken place in connexion with Dr. Damaschino, whose death was reported in THE LANCET of the 4th inst. On the day of the obsequies Madame Damaschino, his mother, notwithstanding her weak state of health, insisted upon attending the funeral ceremony, but she was suddenly seized with a fit of mental aberration on witnessing the removal of the remains of her son. She was immediately taken to her room, and continued for several hours to call for her lost son. She died last week.

Madame Pierre Marie, Doctor of Medicine of the Faculty of Paris, has petitioned the Paris Municipal Council to admit her as a candidate at the competitive examination for a post of physician to the Bureaux of Public Assistance. This petition has been received favourably on the proposition of the reporter of the Commission, as there was nothing in the legislation against such an innovation.

ERRATUM.—In the paragraph headed "Tuberculosis" of my letter of last week, Dr. Villemin was represented as having demonstrated that the bacillus tuberculosis was *not* inoculable. The word "not" should have been omitted.

Paris, Jan. 21st.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

A Case of Traumatic Neurosis.

A subaltern post official was accused of embezzlement before a Berlin jury the other day. He had been at one time engaged in the railway mail service, and had been present in a railway accident, on which occasion he had displayed so much courage and presence of mind that he received a letter of commendation from the Postmaster-General's office. After the accident he gradually became worse and more nervous, and showed all the symptoms of traumatic neurosis. Repeated petitions for discharge with a pension were declined, but in the beginning of this year a furlough of some length was granted him. On the very day on which this temporary release was gained he committed an embezzlement in so inconceivably transparent a manner, that it could not fail to be discovered at the inspection which was to take place three days later. He confessed his crime, but his counsel got his trial postponed with a view to having his mental condition examined. This was done: the experts declared the accused to be suffering from traumatic neurosis, which had so impaired the freedom of his will that he could not be held responsible for the action of which he was accused, and he was at once set at liberty.

Influenza.

At a recent sitting of the Berlin Medical Society Professor Virchow read a letter from the Society for Internal Medicine. At its meeting of the 6th inst. the latter Society had resolved to institute a collective inquiry into the influenza epidemic, which Professor Leyden called a "great medical event," and the Society has now requested the Medical Society to take part in the inquiry. The Society for Internal Medicine has elected a committee for this purpose, including Drs. Leyden, Fraentzel, Baehr, Ewald, Littan, P. Guttmann, Oldendorff, and Strassmann; and the sister Society has, at Virchow's proposal, appointed Drs. Senator, Hirsch, Fuerbringer, and Zuelzer to join them. Their first meeting was held in Professor Leyden's house to-day. A very sad and rare consequence of influenza is reported from Posen—namely, dangerous thrombosis in the left leg. The patient is Surgeon-General Henrici. Professor Bardeleben of Berlin has been consulted, and the limb has been amputated above the knee.

Professor Carl Westphal.

The Berlin University Hospital for Mental Diseases and Diseases of the Nerves has long been without its chief, Professor Carl Westphal, who is now said to be hopelessly ill in a private hospital near Constance, and his work has

been done meanwhile by the private lecturers, Drs. Siemering and Oppenheim. The post, however, is now to be filled by the appointment of a Vice-Professor.

Professor Theodor von Dusch.

Professor Theodor von Dusch died at Heidelberg of the sequelæ of influenza on the 13th instant, aged sixty-five. His book on the diseases of the heart is regarded as one of the best of its kind. The main work of his life was the founding and management of the Louisa Hospital for Children at Heidelberg, of which he was the able and devoted head to the last. A part of the description of the diseases of the heart in childhood in Gerhardt's Handbook of the Diseases of Children was written by him.

Dr. Carl Hergt.

Dr. Carl Hergt, the Nestor of the German alienists, died the other day at Illenau, aged eighty-two. He was one of the first to advocate and practise the gentler treatment of the insane in Germany. The asylum at Illenau, founded by Roller and managed after him by his assistant Hergt, was long one of the model institutions of the Fatherland. The subjects of his few writings were the cholera in France, morphinomania, and the relations of mental derangement to other diseases.

Professor von Nussbaum.

I regret to have to report that Professor von Nussbaum has not yet recovered from his severe attack of influenza. The last bulletin I have seen, however, was favourable. It was dated the 17th inst., and ran thus: "Another night happily got over. Herr Geheimrath [Nussbaum's official title] slept twice every ten minutes, but his awakening was very distressing. Happily he eats better again, and even with appetite.—DR. BRATSCH."

The Royal Veterinary Academy here is preparing to celebrate, some months hence, the hundredth anniversary of its foundation.

Professor Madelung of Rostock has been appointed Volkmann's successor as Professor of Surgery at Halle, and will enter on his new office on April 1st.

Berlin, Jan. 21st.

VIENNA.

(FROM OUR OWN CORRESPONDENT.)

The Influenza.

AT the last meeting of the Vienna medical officers of health the sickness rate from the epidemic at Vienna was estimated to be from 30 to 70 per cent. of the population. It was also stated that the number of deaths from inflammation of the respiratory organs had been 497 during December last, so that there was a marked increase as compared with the mean numbers of deaths from the same cause during the years 1879–88, which reached only 237 in December. But the mortality from inflammation of the respiratory organs would show a further decrease if the rates of the whole year 1889 were taken into consideration. There were 2064 deaths in 1885; 1939 in 1886; 1855 in 1887; 1935 in 1888; and only 1878 in 1889. The improvement of public health was very apparent in Vienna during the last year, and three times the white flag was hoisted at the General Hospital during 1889, signifying that no deaths had occurred there during the last twenty-four hours among its 2000 inmates. No further cases of influenza have been admitted to the hospitals during the last week, and even in Hungary, the southern and the eastern provinces, the number of cases has decreased.

The Micro-organisms of Influenza.

Careful examinations of the nasal secretions of the sputa and of the blood have been made here during the epidemic by various bacteriologists, and I am informed that Dr. Max Jolles has found in the sputa of influenza cases a new micrococcus quite resembling Friedländer's pneumonococcus, and has been able to prepare cultures of this micro-organism. The cultures show also the nail-like shaped appearance of Friedländer's coccus, but the single crops are surrounded by a slightly annular depression, and show greater lustre. The inoculation experiments made with these cultures on animals are not yet finished. The micrococcus has not been found in the blood of the patients. Professor Weichselbaum has also discovered in the nasal mucus of influenza patients a micrococcus similar to the pneumono-coccus, and will deliver a lecture on his bacteriological researches on influenza at the next meeting of the Vienna Society of Physicians. With regard to the common micrococci and similar micro-organisms found in the sputum, it may be stated that they have also been found in water taken from the Vienna Waterworks and examined during the last week of December. As many as 325 were counted in one cubic centimetre of the water.

Vienna, Jan. 21st.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6091 births and 5039 deaths were registered during the week ending Jan. 18th. The annual rate of mortality in these towns, which had been 25·2 and 28·1 per 1000 in the preceding two weeks, declined again last week to 27·0; the rate was 32·1 in London and 22·8 in the twenty-seven provincial towns. During the first three weeks of the current quarter the death-rate in the twenty-eight towns averaged 26·8 per 1000, and was 3·3 above the mean rate in the corresponding periods of the ten years 1880–89. The lowest rates in these towns last week were 14·9 in Nottingham and in Oldham, 15·6 in Brighton, and 17·2 in Leicester. The rates in the other towns ranged upwards to 27·2 in Newcastle-on-Tyne, 27·4 in Birmingham, 28·4 in Manchester, and 32·1 in London. The deaths referred to the principal zymotic diseases, which had been 423 and 396 in the preceding two weeks, further declined last week to 381; they included 157 which were referred to whooping-cough, 61 to scarlet fever, 60 to measles, 40 to diphtheria, 37 to "fever" (principally enteric), 26 to diarrhœa, and not one to small-pox. No death from any of these zymotic diseases was recorded during the week in Halifax; while they caused the highest death-rates in Salford, Manchester, and Bristol. The greatest mortality from whooping-cough occurred in Derby, Wolverhampton, Bolton, Portsmouth, and Bristol; from scarlet fever in Manchester; and from measles in Bradford, Norwich, and Birmingham. The mortality from "fever" showed no marked excess in any of the towns. The 40 deaths from diphtheria in the twenty-eight towns included 22 in London, 3 in Liverpool, 3 in Manchester, 2 in Norwich, 2 in Leeds, and 2 in Sheffield. No death from small-pox was registered in any of the twenty-eight great towns. Only one case of this disease was under treatment on Saturday last in the Metropolitan Asylum Hospitals, and 2 in the Highgate Small-pox Hospital. The number of scarlet fever patients in the Metropolitan Asylum and London Fever Hospitals further fell during last week to 1394 on Saturday night, from 1609, 1570, and 1497 on the preceding three Saturdays; 79 cases were admitted to these hospitals during the week, against 122 and 71 in the preceding two weeks. The deaths referred to diseases of the respiratory organs, which had been 467, 843, and 1069 in the previous three weeks, declined again last week to 1010, but exceeded the corrected average by 464. The causes of 91, or 1·8 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Nottingham, Portsmouth, Blackburn, Bolton, and in five other smaller towns. The largest proportion of uncertified deaths were registered in Sheffield, Hull, Liverpool, and Bristol.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 24·6, 26·5, and 29·0 per 1000 in the preceding three weeks, declined again to 27·2 in the week ending Jan. 18th; this rate exceeded by 0·2 that which prevailed during the same week in the twenty-eight large English towns. The rates in the eight Scotch towns ranged from 14·6 and 18·0 in Leith and Paisley to 32·3 in Dundee and 34·1 in Edinburgh. The 705 deaths in the eight towns showed a decline of 45 from the number in the previous week, and included 34 which were referred to measles, 30 to whooping-cough, 8 to diarrhœa, 6 to scarlet fever, 6 to diphtheria, 2 to "fever," and not one to small-pox; in all, 86 deaths resulted from these principal zymotic diseases, against 77, 83, and 93 in the preceding three weeks. These 86 deaths were equal to an annual

rate of 3·3 per 1000, which exceeded by 1·3 the mean rate last week from the same diseases in the twenty-eight English towns. The fatal cases of measles, which had been 25, 33, and 39 in the previous three weeks, declined again last week to 34, of which 17 occurred in Edinburgh and 14 in Glasgow. The 30 deaths from whooping-cough, on the other hand, showed an increase of 8 upon the number returned in each of the previous two weeks, and included 16 in Glasgow, 7 in Edinburgh, and 3 in Aberdeen. Four of the 6 fatal cases of diphtheria, 2 of the 6 of scarlet fever, and 1 of the 2 of "fever" were returned in Edinburgh, in which city the death-rate from the principal zymotic diseases was equal to 6·3 per 1000. The deaths referred to diseases of the respiratory organs in the eight towns, which had increased in the preceding seven weeks from 121 to 231, were again 231 last week, and exceeded the number in the corresponding week of last year by 71. The causes of 82, or nearly 12 per cent., of the deaths registered in the eight towns were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 24·5, 34·9, and 44·2 per 1000 in the preceding three weeks, further rose to 48·0 in the week ending Jan. 18th. During the first three weeks of the current quarter the death-rate in the city averaged 42·4 per 1000, the mean rate during the same period being 30·8 in London and 31·2 in Edinburgh. The 325 deaths in Dublin last week showed a further increase of 26 upon the numbers in recent weeks; they included 6 which were referred to "fever" (typhus, enteric, or ill-defined), 5 to whooping-cough, 2 to measles, 2 to diphtheria, 2 to diarrhœa, and not one either to small-pox or scarlet fever. Thus the deaths from these principal zymotic diseases, which had been 16 and 20 in the previous two weeks, declined again last week to 17; they were equal to an annual rate of 2·5 per 1000, the rate from the same diseases being 2·3 in London and 6·4 in Edinburgh, in which city a fatal epidemic of measles still prevails. The deaths referred to "fever," which had been 5 and 4 in the preceding two weeks, rose last week to 6. The fatal cases of measles, on the other hand, declined from 7 in the previous week to 2. The 2 deaths from diphtheria exceeded the numbers in recent weeks, as did also the deaths from all causes both of infants and of elderly persons. Thirteen deaths were referred to influenza. Fifteen inquest cases and 12 deaths from violence were registered; and 104, or very nearly a third, of the deaths occurred in public institutions. The causes of 23, or 7 per cent., of the deaths in the city were not certified.

THE SERVICES.

THE Decoration of the Order of Medjidieh, of the Second Class, has been conferred upon Surgeon-Major John Godfrey Rogers, M.B., D.S.O., Medical Staff; and of the Third Class, on Surgeon-Major Aylmer Ellis Hayes, D.S.O., Medical Staff.

ARMY MEDICAL STAFF.—Surgeon-Major William Henry Bant Clapp, M.D., to be Brigade Surgeon, ranking as Lieutenant-Colonel, vice R. W. Davies, deceased (dated Jan. 8th, 1890).

ADMIRALTY.—The following appointments have been made:—Staff Surgeon J. Wilson, M.A., M.D., to the *Vernon*, (dated Jan. 25th, 1890); Surgeon H. W. Rickards to the *Goldfinch* (dated Feb. 5th, 1890); Surgeon J. H. Stenhouse to the *Wildfire* (dated Jan. 18th, 1890); and Fleet Surgeon Alexander Wilson to the *Triumph* (dated Feb 4th, 1890).

VOLUNTEER CORPS.—*Rifle:* 4th Liverpool: Captain G. G. Hodgson is appointed Acting Surgeon (dated Jan. 18th, 1890)—6th Fifeshire: David Hamilton Kyle, M.B., to be Acting Surgeon (dated Jan. 18th, 1890).—*Artillery:* 1st London: David Thomas Key, Gent., to be Acting Surgeon (dated Nov. 27th, 1889).

FOOTBALL CASUALTIES.—Mr. E. A. Hart, whilst playing in a football match, under Association rules, at Scarborough, on Saturday last, sustained a fracture of the collar bone.—Mr. G. K. Hext, during a football match on Saturday last, between Carter's Eleven and St. Andrew's School, at the Lambeth Palace Grounds, displaced the cartilage of his right knee.

Obituary.

ARTHUR WOOD, L.S.A.

WE regret to announce the death of Mr. Arthur Wood, L.S.A., of Kirbymoorside, coroner of York County, an old and much respected medical practitioner in the dales district of North Yorkshire. Mr. Wood died at his residence, Kirbymoorside, at the age of seventy-five years, after a short illness. Since October, 1877, he had held the office of coroner for the greater part of the North Riding of Yorkshire. Technically, the area over which he had control was known as "the Pickering district," but so extensive was the district that the title of "county coroner" was usually applied to the deceased. Mr. Wood succeeded the late Mr. John Ness of Helmsley in the coronership, having previously acted as deputy for that gentleman for ten years. Mr. Ness had been coroner for over thirty years, so that his successor's term of office has been short compared with his. Mr. Wood thoroughly justified the confidence reposed in him. In the thirteen years of his coronership he had some most delicate investigations to conduct, notably the Hamer poisoning case, the last Pickering murder, &c.; and his manner on all occasions was such as to inspire the witnesses with confidence, and generally to lead to the elucidation of the truth. He was kind and courteous to all, but firm enough when occasion demanded. Mr. Wood, who was also medical officer for the Kirbymoorside Poor-law Union, had resided nearly all his life at Kirby, and the poor of the dale district have lost in him a good friend.

JOHN SHARMAN, M.R.C.S., L.S.A.

MR. JOHN SHARMAN, of Gipsy-road, West Norwood, died on Jan. 6th. He had been in practice for more than thirty years in that district, and his loss will be greatly mourned by a large circle of friends. He had been in ill health for many years. He studied at the London Hospital, where he held the posts of house surgeon and Demonstrator of Anatomy; he was also house surgeon to St. Mark's Hospital for Fistula, Lecturer of Anatomy at Grosvenor-place School of Medicine, assistant surgeon to Abersychan Iron Works, surgeon to the Finsbury Dispensary, surgeon to the Norwood Cottage Hospital, medical officer to Lambeth Schools and District at Norwood, public vaccinator, and medical officer to numerous societies.

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the Second Examination in Anatomy and Physiology at a meeting of the Board of Examiners on the 15th inst.:—

J. L. Sawers and J. Mostértz, students of University College; S. A. E. Griffiths, S. B. Hulke, and H. J. E. H. Williams, of Middlesex Hospital; E. L. Adams, of Guy's Hospital; J. N. d'Esterre, of St. Mary's Hospital; C. Seal and P. H. Liddle, of Melbourne University and Mr. Cooke's School of Anatomy and Physiology.

Anatomy only.—F. P. Bush and J. O. Williams, of Guy's Hospital; A. L. Saunders, of St. Bartholomew's Hospital; A. W. C. Lindsay, of St. Bartholomew's and Mr. Cooke's School of Anatomy and Physiology; R. S. Berry and B. Cooper, of St. George's Hospital; G. F. C. Prance, of St. Thomas's and Mr. Cooke's School of Anatomy and Physiology.

Physiology only.—A. Marshall, of St. Thomas's Hospital; J. L. Mackenzie and F. C. Sutherland, of St. Bartholomew's Hospital; Frank Wall, of Ceylon; L. E. Owen, of University College.

Passed on the 16th inst.:—

Anatomy and Physiology.—C. F. Gross, of King's College; R. T. Gilmour, R. H. Hemsted, C. A. Lane, and H. A. McCleland, of St. Mary's Hospital; C. H. Auty, W. A. Dow, E. H. Drew, and T. H. Foulkes, of St. Bartholomew's Hospital; T. W. Bailey, of Westminster Hospital; Ernest Hill, of Middlesex Hospital.

Anatomy only.—G. E. Clarkson, E. E. Elliott, C. G. Mathews, and J. D. Rawlings, of St. Bartholomew's Hospital; C. M. S. Farnum, of King's College and Mr. Cooke's School of Anatomy and Physiology; W. B. Winckworth, of Westminster Hospital; B. A. Castellote, of Middlesex Hospital; T. S. Robson, of Guy's Hospital; B. S. Jones, of St. Thomas's Hospital; R. L. Romer, of St. George's and Mr. Cooke's School of Anatomy and Physiology; J. P. Grieves, of St. Mary's Hospital; W. A. Stephenson, of Charing-cross Hospital; W. E. Baker, of London and St. George's Hospital.

Physiology only.—E. L. Davey and B. W. N. Gowring, of St. Bartholomew's Hospital; W. A. Powell, of Charing-cross Hospital; S. H. Birt and S. P. Hopewell, of London Hospital; F. N. Roth, of St. Mary's Hospital; T. S. Jackson, of Guy's Hospital; H. G. Beville, of St. George's and Mr. Cooke's School of Anatomy and Physiology.

Passed on the 17th inst.:—

Physiology only.—A. Fadelle and H. B. Wilmot, of King's College; J. B. Byles and J. C. R. Curtis, of University College; A. R. Walters, of Cambridge and London Hospital; H. C. Will, of London Hospital; V. B. Jepson, A. G. Tribe, E. Y. Watson, and G. C. W. Williams, of St. Thomas's Hospital; C. A. N. Knox, of Dublin and St. Thomas's Hospital; A. Reeves and H. J. L. Wales, of Guy's Hospital; S. B. Axford, of Charing-cross Hospital; R. D. Moore, of St. Mary's Hospital.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on the 16th inst. Professor Macalister was appointed a member of the Museums and Lecture-rooms Syndicate. Also the following degrees were conferred:—

Master of Surgery.—Robert Lawford Knaggs, Gonville and Caius.
Bachelor of Medicine and Bachelor of Surgery.—George Melmoth Scott, Peterhouse.
Bachelor of Surgery.—Edwin Augustus Wadeson, St. John's.

MEXBOROUGH COTTAGE HOSPITAL.—It has been finally arranged by the committee to open this institution on the 30th inst.

THE NEW FEMALE HOSPITAL, LUCKNOW.—Prince Albert Victor formally opened, on Saturday last, this new Female Hospital in connexion with the Dufferin Fund.

LINCOLN COUNTY HOSPITAL.—A satisfactory financial report for the past year was submitted to the annual meeting of the governors, held at Lincoln on the 9th inst. The abstract of accounts for 1888 shows that the receipts from all sources amounted to £4717 15*s.* 9*d.*, and the expenditure to £4683 15*s.* 11*d.* The year began with a balance due to the treasurer of £100 3*s.* 11*d.*, which has been reduced to £66 4*s.* 1*d.*

A NEW AMBULANCE STATION.—The St. John Ambulance Association has opened (with the sanction of the Dean and Chapter) an ambulance station, under the west portico of St. Paul's Cathedral. Dr. Edwin Freshfield has generously borne the outlay of the necessary fittings, and also of a two-wheeled litter. An attendant will be on daily duty, Sundays excepted, provided with the requisite first-aid appliances and means of transport.

LONDON SCHOOLS DINNER ASSOCIATION.—With a view to obtaining the best information as to the methods and regulations under which meals are given, either by the State or by voluntary agencies, to necessitous children in large centres of population in Austria, Belgium, France, Germany, Switzerland, and the United States of America, Sir Henry Peek, Bart., has offered prizes of £60, £40, and £20 respectively for the three best essays giving reliable information on the subject.

MIDLAND COUNTIES HOME FOR CHRONIC DISEASES.—Lord Leigh presided at the annual meeting, held last week, of the friends and supporters of this institution. The report, which was adopted, showed that the number of inmates was forty-eight, against forty-one last year. There were twelve elected free patients, the highest number yet reached. The committee had continued their policy of placing all gifts and bequests of large amounts to the endowment fund. They acknowledge a gift of £50 per annum from an anonymous donor for a bed for an additional free patient. It was proposed to provide further accommodation for the increased staff of nurses, at an outlay of about £800.

VOLUNTEER MEDICAL STAFF CORPS, LEEDS.—Dr. J. E. Eddison presided on the 17th inst., on the occasion of the distribution by Colonel Wilson, of the Leeds Rifles, of the prizes gained during the year by the members of the Volunteer Medical Staff Corps, 6th (Leeds) Division. The ceremony took place at the Albert Hall, Cookridge-street, and there was a large assembly. During the year the strength of the corps had been ninety-five all told, only three of whom were non-efficients; but recruits recently enrolled had made up the full strength. The corps—the second year of its existence—is in an exceptionally advanced condition for its age. The distribution of the prizes completed, a vote of thanks for presiding was accorded to Dr. Eddison, in responding to which he suggested that a corps of hospital nurses might be formed, and thus make the medical organisation complete.

ODONTOLOGICAL SOCIETY.—At the annual general meeting held on Jan. 13th the following were elected officers for 1890:—President: Felix Weiss. Vice-Presidents: Frederick Canton, James Stocken, David Hepburn, J. C. Wheeler (Southsea), W. B. Macleod (Edinburgh), J. H. Redman (Brighton). Treasurer: Thomas Arnold Rogers. Librarian: Ashley Gibbings. Curator: Storer Bennett. Editor of Transactions: Walter Coffin. Honorary Secretaries: E. G. Betts (Council), J. Ackery (Society), W. A. Maggs (for foreign correspondence).

OPENING OF THE ROYAL VICTORIA HOSPITAL.—On Thursday last the Prince of Wales formally opened the new hospital at Bournemouth amid much rejoicing. It was mentioned as having been built as a Jubilee memorial of the benefits accruing to the people of this country during the past fifty years of Her Majesty's reign. The Prince expressed great pleasure in performing the ceremony, and in being enabled to evince the sympathy he felt for his poor and suffering brethren. In the evening banquets in commemoration of his visit were given at the Royal Bath Hotel and the Town Hall.

BEQUESTS AND DONATIONS TO HOSPITALS.—Jervis-street Hospital, Dublin, has received £105 from the Roman Catholic Archbishop of Dublin, and £100 each from Sir Edward Cecil Guinness, Bart., Mr. Charles Brennan, and Anonymous; also £105 from Messrs. John Power and Son, and £300 from Mr. Charles Kennedy.—The late Dr. Protheroe Smith, of Park-street, Grosvenor-square, London, bequeathed £500 to the Hospital for Women.—The Rev. H. G. Watkins, late Vicar of St. John's, Potter's Bar, Middlesex, left by his will £100 to the City of London Truss Society, £50 each to the Samaritan Societies in connexion with St. Bartholomew's and St. Thomas's Hospitals, and £100 to the Potter's Bar Cottage Hospital.—The Earl of Durham and the Marquis of Londonderry have promised £100 each towards the proposed new building of the Sunderland Eye Infirmary.—The Secretary of the Stanley Hospital, Liverpool, has received £1000 from the Roger Lyon Jones Fund for the endowment fund of the hospital.

THE MUZZLING ORDER.—Mr. Chaplin in an exhaustive speech explained the reasons for his action in the muzzling order, and gave statistics to show that, as the disease was steadily and rapidly increasing, there was a real necessity for action in the matter. He made plain to the deputation, on the authority of the Commission of the House of Lords in 1885, that "rabies was not of spontaneous origin, but a disease capable of transmission by inoculation, and that in all cases where rabies was prevalent the use of the muzzle should be enforced. He might have limited the order to the metropolis, which he considered too narrow a view to take, or he might have made the order universal, which he thought was too extreme, and impossible to enforce. Both objections were met by taking the middle course which they had adopted. He was quite open to consider the question of registration in the future, but at present it formed an inadequate substitute for the muzzle. He called upon the deputation to assist him in his efforts at stamping out one of the greatest scourges which had ever afflicted the human race.

LIVERPOOL MEDICAL INSTITUTION.—At the annual meeting, held on the 9th inst., the following list of officers, Council, and Microscopical Committee was adopted:—President: W. Mitchell Banks, F.R.C.S. Vice-Presidents: A. Bernard, M.B.; Richard Williams, M.R.C.S.; Damer Harrisson, F.R.C.S. Ed.; D. M. Williams, L.K.Q.C.P.I. Hon. Treasurer: J. N. Cregeen, L.R.C.P. Hon. General Secretary: E. W. Hope, M.D. Hon. Secretary of Ordinary Meetings: A. Barron, M.B. Hon. Librarian: C. G. Lee, M.R.C.S. Council: T. H. Bickerton, M.R.C.S.; W. Macfie Campbell, M.D.; Stanley Gill, M.D.; R. Hughes Jones, L.R.C.P.; G. W. Steeves, M.D.; G. Westby, M.K.Q.C.P.I.; H. Briggs, F.R.C.S.; W. Carter, M.D.; P. Davidson, M.B.; G. G. Hamilton, F.R.C.S. Ed.; A. Samuels, M.D.; Joseph Wiglesworth, M.D. Microscopical Committee: A. Barron, M.B.; T. R. Bradshaw, M.D.; J. E. Gemmell, M.B.; T. B. Grimsdale, M.B.; G. G. Hamilton, F.R.C.S. Ed.; C. Macalister, M.B.; J. R. Logan, M.B.; Rushton Parker, F.R.C.S.; F. T. Paul, F.R.C.S.; J. Wiglesworth, M.D.; A. Wilson, M.R.C.S. Auditors: G. W. Steeves, M.D., and T. Bushby, M.B.

MISS FOWLER'S DEPARTURE FOR MOLOKAI.—This heroic young lady sailed from Liverpool on Saturday last in the Cunard steamer *Bothnia* for New York, to assume the late Father Damien's post on the leper island of Molokai. It was ascertained that her stay in America will be short, and that she will proceed by steamer from San Francisco to Honolulu; arrived there, she will drop her proper name for that of Sister Rose Gertrude. Miss Fowler is the daughter of a Protestant clergyman of Bath, is twenty-seven years of age, and attached to a Roman Catholic Sisterhood.

THE NATIONAL ASSOCIATION OF SANITARY INSPECTORS.—The second annual meeting of the Yorkshire centre of this Association was held on Saturday last in the Council Chambers, Town Hall, Leeds. The President, Mr. T. Pridgin Teale, occupied the chair. A report was read which showed a year of successful work, and the President, in the course of his remarks, spoke of the difficulties attending the labours of sanitary inspectors, and thought that it required no little moral courage to perform their duties in the face of men who might go against them and dismiss them at the next election. Dr. G. S. Cameron, medical officer of Leeds, read a paper on the use and abuse of disinfectants.

THE NORTHERN HOSPITAL, LIVERPOOL.—The report for 1889 bears satisfactory evidence of the good work done during the past year. The daily average number of beds occupied was 125, against 128 in the previous year; 1842 in-patients and 5407 out-patients (once counted) had been treated, a considerable increase in both cases on 1888. The horse ambulances had relieved 786 cases, and continued to be of essential service to the institution. The financial statement shows a balance due to the bankers of £2241 17*s.* 9*d.*, and the outstanding liabilities amount to £793 19*s.* 1*d.*, against £862 9*s.* 7*d.* at the same time last year. A feature in the report to be noticed is that, whilst the usefulness of the hospital had been considerably extended, the subscriptions had diminished.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—The Quarterly Court of the Society was held on Wednesday, Jan. 8th, at 8 P.M., at 20, Hanover-square; the President, Sir James Paget, in the chair. Two new members were elected and the deaths of three reported. Fresh applications for grants were read from two widows, and relief was given them; and the deaths of two widows in receipt of grants were announced. It was resolved that a sum of £1343 be divided among the sixty-one widows, fourteen orphans, and the three orphans on the Copeland Fund. The following legacies had been received: £1000 from the executors of Miss Carfine (first instalment), and £35 2*s.* 2*d.* from the executors of Mrs. Elizabeth Douglas (remainder). The expenses of the quarter were £65 19*s.*

ROYAL METEOROLOGICAL SOCIETY.—The annual meeting of this Society was held on Wednesday, the 15th inst., at the Institute of Civil Engineers; Dr. W. Marcet, F.R.S., President, in the chair. Dr. Marcet delivered an address on "Atmospheric Dust," in the course of which he said it consisted of both organic and inorganic dust, the one combustible and the other incombustible, and both could be rendered visible by means of a ray from an electric light. The lecturer dwelt on the composition of this dust, and the facilities it afforded for the carrying of infection; and illustrations were given to demonstrate its explosive nature when mixed with the atmospheric air. Dr. Marcet then gave an account of the nature of the dust storms of India and the formation of the dust from volcanoes. The address was illustrated by a number of lantern slides.

THE MARGATE SEA-BATHING INFIRMARY.—Mr. Joseph Sebag Montefiore, J.P., High Sheriff of Kent, presided at the festival dinner of this charity at the Hôtel Métropole on Wednesday. Many influential persons were present. In proposing the toast of "The Institution," the Chairman referred to the fact that they were now entering on the hundredth year of the foundation of the institution. During that time it had done an enormous amount of work in connexion with scrofulous diseases. At present 158 patients were under treatment, the number of beds in the institution being 220. Unfortunately their financial position was not satisfactory. Their expenses last year were £9500 and their income £6162, so that in order to make both ends meet they had been obliged to spend £3568 of legacies as well as to borrow £1400. The subscriptions announced amounted to over £2000.

PRESENTATIONS.—At the Town Hall, North Shields, on the 13th inst., Mr. John Pickering Bates, M.R.C.S., lately of Teignmouth, was presented by the inhabitants of that borough with a massive silver tray, weighing upwards of 113 oz., as a farewell recognition of services rendered publicly and individually, he having, after thirty-five years' residence in that town, severed his connexion with it and removed to Morpeth.—Mr. Henry Caudwell, L.R.C.P., L.R.C.S. Edin., lately of Aylesbury, but now of Woodstock, has been presented with a handsome marble clock, four cases of dental and surgical instruments, and an illuminated address, by numerous friends and brother practitioners in the district of Aylesbury, on his leaving the town, after upwards of three years' residence, as house-surgeon at the Bucks General Infirmary, in testimony of the regret generally felt at his departure.

BOOKS ETC. RECEIVED.

ALLEN, W. H., & CO., Waterloo-place, Pall-mall, London.
James Vraille: the Story of a Life. By Jeffery C. Jeffery. In Two Volumes. 1890. pp. 243 and 228.

BAILLIÈRE, TINDALL, & COX, King William-street, Strand, London.
The Latin Grammar of Pharmacy, for the use of Medical and Pharmaceutical Students. With an Essay on the Reading of Latin Prescriptions, and Reference Vocabulary. By Jos. Ince, F.C.S., F.L.S., F.G.S. Fifth Edition. 1890. pp. 302.
Practical Guide to the Demonstration of Bacteria in Animal Tissues, for the use of Students and Practitioners. By Dr. H. Kühne, Wiesbaden. Translated and edited by V. D. Harris, M.D. Lond., F.R.C.P. 1890. pp. 53.

CASSELL & CO., London.
The Pulse. By W. H. Broadbent, M.D. Illustrated with 59 Sphygmographic Tracings. 1890. pp. 312.
The Year-book of Treatment for 1890. A Critical Review for Practitioners of Medicine and Surgery. pp. 324.

CHRISTIAN COMMONWEALTH PUBLISHING CO., Ludgate-hill, London.
Faith Cures, their History and Mystery. By A. J. L. Gliddon. 1890. pp. 211. Price 2*s.*

CHURCHILL, J. & A., New Burlington-street, London.
Cancer of the Rectum, especially considered with regard to its Surgical Treatment. Jacksonian Prize Essay. By Harrison Cripps, F.R.C.S. Third Edition. 1890. pp. 206.
Year-book of Pharmacy, from July 1st, 1888, to June 30th, 1889; and Transactions of the British Pharmaceutical Conference, at the Twenty-sixth Annual Meeting, held at Newcastle-on-Tyne, September, 1889. pp. 620.
A German-English Dictionary of Medical Terms. By F. Treves, F.R.C.S., and Hugo Lang, B.A. 1890. pp. 403.
The Rheumatic Diseases (so called), with the original Suggestions for more clearly defining them. By H. Lane, L.R.C.P. Edin., M.R.C.S., and C. T. Griffiths, L.R.C.P., M.R.C.S. 1890. pp. 128.
Original Contributions to Ophthalmic Surgery. By J. R. Wolfe, M.D., F.R.C.S. With Illustrations. 1890. pp. 97.

LEWIS, H. K., Gower-street, London.
A Practical Treatise on Nervous Exhaustion (Neurasthenia); its Symptoms, Nature, Sequences, and Treatment. By G. M. Beard, A.M., M.D. Edited, with notes and additions, by A. D. Rockwell, A.M., M.D. 1890. pp. 254.
A Treatise on Headache and Neuralgia, including Spinal Irritation, and a Disquisition of Normal and Morbid Sleep. By L. Corning, M.A., M.D. Second Edition. With an Appendix—Eye-strain, a cause of Headache—by D. Webster, M.D. Illustrated. 1890. pp. 259.

MACMILLAN & CO., London.
The Nervous System and the Mind. A Treatise on the Dynamics of the Human Organism. By Charles Mercier, M.B. 1888. pp. 374.

REMINGTON & CO., Henrietta-street, Covent-garden, London.
A Fairy Godfather. Edited by J. A. Goodchild. 1890. pp. 349.

RENSHAW, HENRY, 356, Strand, London.
Casuistique et Diagnostic Photographique des Maladies de la Peau. Premier Livraison. Par le Dr. D. Van Haren Noman. 1889.

SINCLAIR, TWEEDIE, & CO., Eldon-street, London, E.C.
Sewer Ventilation and Sewage Treatment. By R. Harris Reeves. 1889. pp. 57.

TRÜBNER & CO., Ludgate-hill, London.
Proceedings of the Society for Psychical Research. Part XV. December, 1889. pp. 227. Price 3*s.*

VAIL, J. H., & CO., New York.
Outlines of the History of Medicine and the Medical Profession. By J. H. Baas, M.D. Translated, revised, and enlarged by H. E. Handerson, M.A., M.D. 1889. pp. 1173.

WOOD, WM., & CO., New York.
A Treatise on Diseases of the Nose and Throat. In Two Volumes. By F. H. Bosworth, M.A., M.D. Vol. I.: Diseases of the Nose and Naso-pharynx. With coloured Plates and Wood-cuts. 1889. pp. 670.

WRIGHT, JOHN, & Co., Bristol; SIMPKIN, MARSHALL, & Co., London. The Surgical Treatment of the Common Deformities of Children. By Walter Pye, F.R.C.S. Eighty Illustrations. 1889. pp. 216.

Clinical and Chemical Observations on Plumbism, due to Lead-polluted Water, with Hints on its Prevention; by John Brown, M.D. Thesis presented for the Doctorate in Medicine in the Victorian University, October, 1889 (Simpkin, Marshall, & Co., London, price 8*d.*).—Der Gegenwärtige Wissenschaftliche Standpunkt der Mechanotherapie; von Dr. Anton Bum (reprint, Wien, 1889).—Sulla Rivedibilità per Difetto di Statura e sulla Storia della Miopia, Ipermetropia ed Astigmatismo dal 1860 al 1889. Risposto al reclutamento Militaire Italiano (P. Spariglia, Foligno, 1889).—The Coming Epidemic: Influenza; its History, Symptoms, Treatment, &c.; by Scrutator (W. H. Allen and Co., London, 1890, price 6*d.*).—Arsberättelse för 1888 Fran Sabbatsbergs Sjukhus 1 Stockholm för 1888; Afpifven af Dr. F. Warfvinge (Isaac Marcus Stockholm, 1889).—Hints on Nursing, by Mena Drew; with Introduction by Dr. H. A. Allbutt (R. Forder, London, 1889, price 6*d.*).—Influenza, its Prevention, Symptoms, and Treatment; by J. Ernest Viney, M.D. (Cantab.), M.R.C.S. Eng. (H. K. Lewis, London, 1890, price 6*d.*).—Merck's Bulletin: a periodical Record of New Discoveries, Introductions or Applications of Medicinal Chemicals (second year), 1889 (E. Merck, Darmstadt and London).—The Nervous Substratum of Influenza; a series of Cases illustrating Localisation in Nervous Diseases; the Hepatic Element in Disease: papers by J. W. Springthorpe, M.A., M.D. Melb., M.R.C.P. Lond. (Stillwell & Co., Melbourne, 1889).—The Royal London Ophthalmic Hospital Reports; edited by R. M. Gunn, M.A., F.R.C.S.; vol. xii., part 4, December, 1889 (J. & A. Churchill, London).—Sewer Ventilation and Sewage Treatment; by R. Harris Reeves (Sinclair, Tweedie, & Co., London, E.C., 1890, price 2*s.* 6*d.*).—Étude sur la Syphilis et son Traitement; par le Dr. Simon Smirnoff (G. Masson, Paris).—On London Fogs; by Alfred Carpenter, M.D. (J. W. Ward, Croydon, 1890, price 1*s.*).—L'Immunité par les Leucomaïnes; par Eusèbe Güell y Bacigalupi, Deuxième édition augmentée (O. Berthier, Paris, 1889).—Über Urmiatherium Polaki einen neuen Sivatheriden aus dem Knochenfelde von Maragha; von Dr. Alfred Rodler; mit 4 Tafeln (Aus der Kaiserlich-Königlichen Hof und Staatsdruckerei, Wien, 1889).—North of England Institute of Mining and Mechanical Engineers: Coal Mining at Warora Central Provinces, East India; by C. L. Bunning, M.E., F.G.S. (Lambert & Co., Newcastle-upon-Tyne, 1890).—Ueber die historische Entwickelung der öffentlichen Gesundheitspflege; Prof. Dr. Aug. Hirsch (A. Hirschwald Berlin, 1889).—Hydrophobia, its Cause and Prevention; by Frank Kerslake (Society for the Prevention of Hydrophobia).—Some Suggestions for the Revision of the Tables of Mortality; by Reginald Dudfield, M.A., M.B., D.P.H. Camb.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.

BARBER, G. T. C., M.R.C.S., L.R.C.P., L.S.A., has been appointed Assistant House Surgeon to the General Hospital, Birmingham, vice S. Necklin, M.R.C.S., L.R.C.P.

CROOK, A., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Fourth District of the Norwich Union.

EARLE, W. G., M.R.C.S., L.S.A., has been appointed Medical Officer for the East District of the Bingham Union.

EDWARDS, F., L.R.C.P. Edin., L.F.P.S. Glas., has been appointed Medical Officer for the Duxford District of the Linton Union.

ELLIS, H. D'ARCY, L.R.C.P. Edin., M.R.C.S., has been appointed Medical Officer to the Brierley and Quarry Bank, vice Ashmead, deceased.

FOX, HERBERT, F.R.C.S., L.R.C.P. Lond., has been reappointed Medical Officer for the Stainland District of the Stainland-with-old-Lindley Union.

JOHNSTONE, J. M'C., M.B., C.M. Glas., has been appointed Assistant Medical Officer to the Govan Poorhouse and Asylum, vice W. G. Pretsell, M.B., C.M., resigned.

LANG, G. H., M.B., Lond., M.R.C.S., has been appointed Assistant Medical Superintendent of the Infirmary, Parish of St. Pancras.

MURRAY, R. W., F.R.C.S. Eng., has been appointed Assistant Medical Officer to the Liverpool Infirmary for Children, vice N. P. Marsh, M.B. Lond., promoted.

MURSELL, H. TEMPLE, M.B., M.C. Edin., has been appointed Junior House Surgeon to the Ancoats Hospital, Manchester, vice C. Alex. Ducket, M.R.C.S., L.R.C.P. Lond., resigned.

PEGLER, L. H., M.D. Edin., M.R.C.S., has been appointed Medical Officer and Public Vaccinator for the Shirland District of the Chesterfield Union.

PLATT, J. E., M.B. Lond., M.R.C.S., L.R.C.P., has been appointed House Surgeon to the Ashton-under-Lyne District Infirmary, vice J. W. Talent, M.B., C.M., resigned.

RYMER, JAMES F., M.R.C.S., L.D.S. Eng., has been appointed Honorary Dental Surgeon to the West Kent General Hospital.

SKRIMSHIRE, F. W., M.R.C.S., L.S.A., has been reappointed Medical Officer for the Morpeth Union District.

TAYLOR, L. A., M.R.C.S., L.R.C.P. Edin., D.P.H. Lond., has been appointed Medical Officer and Public Vaccinator for the Brierley Hill District of the Stourbridge Union, vice G. Ashmead, L.R.C.P., L.R.C.S. Edin., deceased

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

BRISTOL HOSPITAL FOR SICK CHILDREN AND WOMEN.—House Surgeon. Salary £100, with rooms and attendance.

CHELSEA HOSPITAL FOR WOMEN, Fulham-road, S.W.—Anæsthetist.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—House Physician for six months. (Apply to the Secretary, 24, Finsbury-circus, E.C.)

HOLBORN UNION.—District Medical Officer for No. 2 District. Salary £105 per annum. All drugs and medicines supplied by the guardians. (Apply, Union Offices, Clerkenwell-road, E.C.)

HULME DISPENSARY, Manchester.—Honorary Surgeon.

METROPOLITAN HOSPITAL, Kingsland-road, E.—Assistant Physician.

NORTH STAFFORDSHIRE INFIRMARY.—Resident Assistant House Surgeon. No salary, but board and lodging provided in the hospital.

ST. MARY'S HOSPITAL, W.—Qualified Assistant in the Electro-Therapeutic Department.

WEST-END HOSPITAL FOR DISEASES OF THE NERVOUS SYSTEM, 73, Welbeck-street, W.—Dental Surgeon.

WESTMINSTER GENERAL DISPENSARY, 9, Gerrard-street, Soho.—Honorary Physician.

Births, Marriages, and Deaths.

BIRTHS.

BOURNE.—On Dec. 27th, at the Adyar, Madras, the wife of Dr. Alfred Gibbs Bourne, of a son.

FITZ HENRY.—On Dec. 5th, 1889, at Leyttelton, New Zealand, the wife of W. Fitz Henry, M.R.C.S. Eng., of a daughter.

KIDD.—On Jan. 19th, at Carlton House, Enniskillen, the wife of Leonard Kidd, M.D., of a daughter.

RECKITT.—On Jan. 15th, at Boston, Lincolnshire, the wife of Edward B. Reckitt, L.R.C.P. Edin., of a son.

SPILLER.—On Jan. 21st, at St. Mary's-road, Canonbury, N., the wife of John Spiller, F.C.S., of a son (Leonard).

TREND.—On Jan. 11th, at Grosvenor-square, Southampton, the wife of Theophilus W. Trend, M.D., of a daughter.

WEBBER.—On Jan. 22nd, at Kensington-crescent, W., the wife of William Littleton Webber, F.R.C.S., of a son.

MARRIAGES.

GRANT—FRITH.—On Jan. 16th, at St. Stephen's, Wandsworth, J. Dundas Grant, M.A., M.D., of Finsbury-square, to Helen, daughter of the late Edward Frith, Esq., of West Hill, Putney.

MACPHERSON—WALLACE.—On Jan. 15th, at 66, Northumberland-street, Edinburgh, by the Rev. Arthur Gordon, M.A., St. Andrew's Church, John Macpherson, M.B., Medical Superintendent, Stirling District Asylum, Larbert, to Rachel Annie, younger daughter of the David Wallace, Balgrummo, Leven, Fife.

DEATHS.

BENFIELD.—On Jan. 16th, at Leicester, Thomas Warburton Benfield, F.R.C.S., aged 68.

CAMPBELL.—On Jan. 16th, suddenly, at Bishop's-road, Edward Campbell, Surgeon-Major Bengal Army, formerly Viceroy of India's Body-guard, and late of Stapleton, Gloucestershire, aged 73.

CLAYTON.—On Jan. 17th, at Ewbank House, Accrington, Louis Richard Clayton, L.R.C.P. Lond., M.R.C.S., aged 56.

CONNOR.—On Jan. 20th, at Havelock-road, Hastings, Louis Richard Connor, M.D. Aberd.

DICKINSON.—On Jan. 18th, at 117, Bow-road, London, E., Margaret Ann, wife of Jonathan Dickinson, Surgeon, aged 53.

EGAN.—On Jan. 14th, at Christ Church Vicarage, South Hackney, the Rev. John Cruice Egan, M.A., M.D., Vicar, aged 68.

GORDON.—On Dec. 15th, suddenly, at the Mountain Hospital of the Island of Ascension, South Atlantic, Henry James Gordon, Surgeon Royal Navy, aged 31, eldest son of the late Rev. Thomas Gordon, D.D., Newbattle.

GRIFFITH.—On Jan. 15th, at Purfleet, Essex, Charles William Griffith, M.R.C.S., L.R.C.P. Lond., Brigade Surgeon, from pneumonia.

JACKSON.—On Jan. 16th, at Ash Field House, Market Weighton, Alfred Jackson, L.R.C.P., L.R.C.S. Edin., aged 39.

LEONARD.—On Jan. 13th, Amy, the wife of Dr. Stephen Leonard, of 395, Bethnal-green-road, Victoria-park, after a few days' illness, from pneumonia.

MILLER.—On Jan. 16th, at Park-road, Southborough, John Bell Miller, M.B., C.M. Edin.

OSBORNE-WALKER.—On Jan. 15th, at his residence, Glenville House, Crick, Northants, T. Osborne-Walker, Esq., M.R.C.S., L.S.A. Lond., &c. Interred at Rugby Cemetery.

PYLE.—On Jan. 20th, at Norwood, Thomas Thompson Pyle, M.D., late of Sunderland, aged 53.

SHAW.—On Dec. 18th, at 136, Abbey-road, Kilburn, Alexander Shaw, F.R.C.S., in his 86th year.

TOWNSEND.—On Jan. 12th, at Prospero-road, Upper Holloway, London, N., Henry James Townsend, M.R.C.S., aged 79.

WYLLIE.—On Jan. 13th, suddenly, at his residence, Craigend, Gourock, George Wyllie, L.F.P.S. Glasg., Medical Officer for Inverkip, aged 73.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, January 27.

CHARING-CROSS HOSPITAL.—Operations, 3 P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, daily at 10 A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
ST. MARK'S HOSPITAL.—Operations, 2.30 P.M.; Tuesday, 2.30 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.
UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M.
LONDON POST-GRADUATE COURSE (Royal London Ophthalmic Hospital, Moorfields).—1 P.M. Mr. Marcus Gunn: External Diseases of the Eye.
LONDON POST-GRADUATE COURSE (Hospital for Sick Children, Great Ormond-st., Bloomsbury).—4 P.M. Dr. Barlow: Infantile Paralysis.
SOCIETY OF ARTS.—8 P.M. Mr. Silvanus P. Thompson: The Electro-magnet. (Cantor Lecture.)
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Clinical Evening. Dr. Theodore Williams: Case of Tubercular Basic Cavity.—Mr. Watson Cheyne: Case of Operation for Undescended Testicle.—Dr. Herschell: Case of Thomsen's Disease.—Dr. Hale White: Case of Thomsen's Disease.—Mr. Hurry Fenwick: Case of Complete Epispadias.—Mr. Pye: Case of Removal of Internal Semilunar Cartilage for Derangement of Knee.—Dr. Angel Money: (1) Case of Heart Disease with Nervous Symptoms; (2) Case of Instrumental Indentation of Frontal Bone.

Tuesday, January 28.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays at the same hour.
GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same days, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. G. J. Romanes: The Post-Darwinian Period.
LONDON POST-GRADUATE COURSE (Hospital for Diseases of the Skin, Blackfriars).—4 P.M. Mr. Jonathan Hutchinson: Herpetology.
SOCIETY OF ARTS.—8 P.M. Mr. E. C. Robins: The Relation of the Fine Arts to the Applied Arts.

Wednesday, January 29.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M. Operations by the Obstetric Physicians on Thursdays at 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M. Thursday & Saturday, same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical Visits on Wednesday and Saturday at 9.15 A.M.
LONDON POST-GRADUATE COURSE (Hospital for Consumption and Diseases of the Chest, Brompton).—4 P.M. Dr. Kingston Fowler: The Diagnosis of Valvular Disease of the Heart.
LONDON POST-GRADUATE COURSE (Royal London Ophthalmic Hospital, Moorfields).—8 P.M. Mr. W. Lang: Ophthalmoscopic Cases.
SOCIETY OF ARTS.—8 P.M. Mr. Gilbert Redgrave: The Utilisation of Blast Furnace Slag.

Thursday, January 30.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Ear and Throat Department, 9 A.M.
LONDON POST-GRADUATE COURSE (National Hospital for the Paralysed and the Epileptic, Queen-square, Bloomsbury).—2 P.M. Dr. Ormerod: Electrical Testing.
ROYAL INSTITUTION.—3 P.M. Mr. E. R. Mullins: Sculpture in relation to the Age.
LONDON POST-GRADUATE COURSE (Hospital for Sick Children, Great Ormond-st., Bloomsbury).—4 P.M. Dr. Barlow: Infantile Paralysis.
CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA-PARK, E.—4.30 P.M. Dr. Glover Lyon: The Mechanics of the Chest in Health.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Patients and Card Specimens at 8 P.M. Mr. Treacher Collins: Glaucoma after Extraction of Cataract.—Dr. Berry (Edinburgh): (1) Demonstration of a New Stereoscopic Phenomenon, and the possible Clinical Use to which it might be put; (2) Note on a Purulent Choroiditis occurring months after a successful Cataract Extraction; (3) Note on the Immediate and Remote Effects of Tenotomy on the Lateral Movements of the Eye; (4) On the Simplest Means of determining the True Relation between Accommodation and Convergence. Card Specimens:—Mr. Edridge Green: Colour Tests.—Mr. Lang: Retinitis Pigmentosa (early stage).—Mr. Stanford Morton: Case of Alexia.—Dr. Collins: Retinitis Albuminurica.—Mr. Lindsay Johnson: Congenital Corneal Growth.—Mr. Browning: Associated Movements of the Upper Eyelids with the Internal Recti.

Friday, January 31.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
LONDON POST-GRADUATE COURSE (Hospital for Consumption and Diseases of the Chest, Brompton).—4 P.M. Dr. Kingston Fowler: The Diagnosis of Valvular Disease of the Heart.
ROYAL INSTITUTION.—9 P.M. Sir Frederick Abel: Smokeless Explosives.

Saturday, February 1.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.
LONDON POST-GRADUATE COURSE (Hospital for Diseases of the Skin, Blackfriars).—2 P.M. Dr. Payne: Acne, its Different Forms.
ROYAL INSTITUTION.—3 P.M. Prof. Flower: The Natural History of the Horse, and of its Extinct and Existing Allies.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, January 23rd, 1890.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Jan. 17	30·10	S.W.	47	46	54	47	46	..	Overcast
" 18	29·72	S.W.	44	43	76	52	42	·12	Cloudy
" 19	29·50	W.	50	47	76	51	44	·12	Cloudy
" 20	29·47	W.	38	37	65	45	37	·08	Cloudy
" 21	29·64	N.W.	37	36	60	46	35	..	Cloudy
" 22	29·04	S.W.	41	39	72	48	36	·16	Overcast
" 23	28·72	S.W.	48	46	74	51	39	·13	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

FATHER DAMIEN.

PAMPHILE DE VEUSTER, Father Damien's brother, has issued a circular stating that it had been Father Damien's wish to see his great work put on a permanent footing, and to ensure the continuation of his undertaking. Nothing seemed so suitable for this purpose as the founding of a seminary bearing his name, whose object should be the special purpose of training people to continue the work he had begun in the Sandwich Islands, and particularly at Molokai.

Mr. A. S. Salmond is referred to a general notice at the head of this column.

CASE OF INFLUENZA WHILST UNDER THE EFFECTS OF MERCURY.

To the Editors of THE LANCET.

SIRS,—A gentleman under my care finished a three weeks' mercurial course at Aix on Dec. 24th, 1889. He continued taking the hot baths till the 27th, when he left for England, sleeping that night at Brussels. The hotel at which he stayed was full of sufferers from the influenza. On the afternoon of the 31st he had a slight headache, a most unusual occurrence. On the morning of Jan. 1st he rode out ten miles to a meet, but the ground being hard from the frost there was no hunting. Throughout the morning he felt very thirsty, and by the time he had reached his home he had become so giddy that he could hardly sit upon his horse. During the remainder of the day he suffered from headache and feeling of sickness. Mid-day on the 2nd I was sent for. At this time there was intense headache, pains all over body and limbs, quick pulse, and a temperature of 103°. This gentleman is now (Jan. 5th) quickly recovering from an undoubted attack of genuine influenza, his temperature this evening being 99½°, all headache having disappeared, and likewise the feeling of having been bruised all over. I relate this case to show that mercurialisation is no preventive of influenza.

I am, Sirs, yours truly,

Jan. 5th, 1890. M.R.C.S.

INFLUENZA AND CHOLERA.

SINCE in past times it has occasionally happened that an epidemic of influenza has been followed at some months' interval by the spread of cholera, the notion has arisen that there is some necessary connexion between the two diseases, and it has been hinted that we may look for an invasion of the more dreaded malady. This notion should be dispelled; for there is no known relationship between the two diseases. We may refer to the statement of the Medical Council of the Prefecture of St. Petersburg, which was promulgated to allay such fears as those above indicated. That statement was to the effect that, according to the latest teachings of medical science, every epidemic disease is produced by special germs, incapable of transmutation into other forms, and that no contagious disease can break out in any place where these germs have not been previously introduced. The Council therefore declared there was no ground for supposing that influenza could give rise to an epidemic of cholera, but that although sanitary conditions do not seem to have had much effect upon the spread of influenza, the time was opportune for seeing to the sanitation of the city.

Mr. Arthur Manners.—The unsteady gait, increased reflexes, &c., would appear to point to postero-lateral sclerosis (ataxic paraplegia). It is not stated whether there was any bladder trouble. Possibly the apoplectiform attacks were uræmic in character. It is unfortunate that there was no autopsy in so interesting a case.

Q.—We regret that we have not the information desired. An application to the India Office would probably obtain it.

PRACTICE AT THE CAPE.

To the Editors of THE LANCET.

SIRS,—Recently I have seen several inquiries in your columns as to the prospects of medical practice at the Cape—meaning, I presume, South Africa generally. It must be remembered that the European population of South Africa is very limited in numbers, and does not amount to a million all told (that is, not one-third of the population of London), and is scattered over an area twice as large as the British Isles; and it is upon this meagre population that medical men in South Africa depend for practice, the native population being mostly in a state of servitude or poverty, and not in a position to do much towards the support of medical men. There are no large cities in South Africa, Cape Town, with its suburbs, having only a population of about 60,000, the half of which consists of coloured people. Next in size comes Johannesburg, with a white population estimated at about 25,000. Then comes Kimberley, with 18,000 or 20,000 whites. There is not a single other town in South Africa with a population, black and white included, of 20,000 inhabitants, and only seven towns with a population above 7000. These towns are all well supplied with medical men of fairly good standing and attainments; and most of the country villages, with from 300 or 400 to 1500 inhabitants, have their two or three doctors, whose practice depends chiefly on the support of the farmers, the most of whom, except in two or three districts, are of Dutch extraction, speaking only the Cape Dutch language. I have had a good many years' experience, both in up-country village and town practice, and if any young practitioner were to ask me now whether I would advise him to come to South Africa, I should certainly tell him not to think of such a thing. There was a time, some ten or fifteen years ago, when most of us in practice in South Africa were doing well, when the average practice brought in about £1000 or £1200 a year, and some few even double that amount. But these times are gone, and now the average man can only get in £600 or £700 a year with difficulty, which is equivalent to about £400 in England for the same comforts. The most lucrative practice I have ever heard of in South Africa was worth £5,000 per annum (I believe that was an exaggerated estimate) and was held by a man who was exceptionally fortunately situated. When a man comes to settle here he must say farewell to fame, for communication with the scientific world is so difficult that, however clever and highly educated he may be, he has but scanty opportunity of testing, not to say of bringing forward, any advanced views he may hold. There are no medical schools out here, and very few good appointments are open to the profession, which, when any of these become vacant, are given to some friend or relative of some one in authority, or of the ministry then in power. There are not a few men of good professional standing out here possessing the highest possible degrees, but who are never heard of outside the immediate district of South Africa in which they are practising. I knew of two M.B.'s of London some years ago, practising in neighbouring country districts, who dispensed their own medicines, and were doing neither better nor worse than those possessing even the humblest degrees. They got all the practice in the district in which they were the only practitioners, and no more. Quacks are numerous, notwithstanding a law against their nefarious practices, which is so absurdly framed that it is very easy for them to evade it. A doctor out here has many hardships to put up with, such as a man in England can scarcely conceive of. I have myself had many a rough journey extending sometimes to a distance of twenty or thirty miles, in a rickety Cape cart, over really dangerous roads, and often on dark nights, for which I have never received any fee at all, and in other cases the fee is grudgingly paid by the more or less impecunious farmers and tradesmen. If a patient becomes insolvent, and that is a very common thing, the whole proceeds of the estate are usually swallowed up by the mortgagees and lawyers, and the doctor gets nothing. The social position of a doctor out here is nothing to boast of. In the larger towns it is fairly good, though even there a doctor may often find men his equals or inferiors in education and everything else preferred before him; but in the country towns and villages not only will he find the Dutch parson considered his social superior, but generally the two or three auctioneers and agents, the very lowest grade in the legal profession, and even two or three of the leading shopkeepers, are given precedence over him at all public functions, so that a doctor's position is often truly humiliating. It may be thought that I am interested in warning young practitioners from settling out here, and I daresay there are men who, having retired from practice years ago, will be ready to draw a different picture from mine; but I can assure you I have simply stated the case as it is at the present time, in which I think I shall be borne out by any man practising out here now.

I am, Sirs, yours faithfully,

South Africa, Dec. 18th, 1889. MEDICUS CAPENSIS.

EARLY PREGNANCY.

To the Editors of THE LANCET.

SIRS,—I was asked to attend the wife of a tramcar conductor in her fifth labour. She was a very short and stout woman twenty years of age. She had an easy delivery at full time of a healthy, well-developed male child. She informed me that she had been married before she was quite thirteen years old, out in Australia, to her present husband, and that she was a mother before she had completed her fourteenth birthday. This was her fifth child. All the children had been born at full time. Two of her five children she had lost in their second year—one evidently from tubercular meningitis, and the other from tabes mesenterica. The other children are still living. Her statements were in every respect corroborated by her husband. This case is interesting only as a record of early pregnancy; for though undoubted cases of pregnancy occurring between the ages of nine and fourteen have been related by high authorities, yet they are decidedly rare.

I am, Sirs, yours faithfully,

Hastings, Jan. 6th, 1890. WORSLEY J. HARRIS, L.R.C.P., M.R.C.S.

"MEASLES AS A NOTIFIABLE DISEASE."

To the Editors of THE LANCET.

SIRS,—Under the above heading, in your last issue, p. 176, "W. P." draws attention to the omission of measles from the list of diseases to be notified in his district under the Infectious Disease Notification Act, 1889. It so happens I have received a similar notice (including this omission) from the Barton Regis Union Rural Sanitary Authority. That one of the most infectious of the exanthemata should be omitted in such important notices cannot be accidental. Then, with whom does the fault lie? Surely, not with the medical officer of health. An exanthem, which under proper medical treatment is rarely fatal, is thus allowed to claim a large annual mortality, in spite of the much-lauded advances of sanitary science.—Believe me, Sirs, yours truly,

Jan. 21st, 1890. P. M. B.

*** The fault lies with the Act, which does not mention measles.—ED. L.

THE DISCUSSION ON PNEUMONIA AT THE MEDICAL SOCIETY.

To the Editors of THE LANCET.

SIRS,—May I ask you to correct an error in your report of the few remarks which I made at the meeting of the Medical Society on the 13th inst., in the discussion on Dr. Churton's paper on Pneumonia? I did not say that I thought stimulants "did more harm than good." What I said was that they were often given in excessive quantity, and that when they ceased to do good they did harm. Pneumonia seems to me to be just the type of disease in which stimulants, judiciously administered (not in a routine way), are of the greatest value.

I am, Sirs, yours truly,

Jan. 21st, 1890. DAVID W. FINLAY.

Manzoni.—We think that our correspondent is entitled to press the reference to arbitration. We cannot pretend to select the arbitrators, but would suggest that each side should select one, and that the third should be selected by the two so chosen.

R. W.—Our correspondent should try to procure a copy of Percival's classical book on Medical Ethics.

"INCONTINENCE OF URINE."

To the Editors of THE LANCET.

SIRS,—The little patient of "T. S. G." should be lifted upon a chamber utensil once or twice in each night, anticipating, if possible, the time at which the accident usually occurs. Also care should be taken that she sleeps upon her side, and no food or drink should be given after 5 or 6 P.M. Animal food should be given sparingly or withheld. Has she worms, and has the urine been examined? On no account use punishment, but try dieting, fresh air, rest from study, baths, and painstaking efforts on the part of her mother or nurse.

I am, Sirs, yours faithfully,

Woking, Jan. 20th, 1890. HENRY WILLSON, M.D.

THE REPUTED DANGER IN COOKING UTENSILS MADE OF NICKEL.

DR. A. ROHDE has convinced himself by some most painstaking experiments that the use of domestic utensils made of nickel is quite harmless. A nickel plated vessel with a surface of 290 square centimetres, containing a 2 per cent. solution of acetic acid, lost in twenty-four hours only from twenty-four to twenty-nine milligrammes of the nickel, and tartaric, citric, and lactic acid have all about the same effect on the metal as acetic acid. As such small quantities of nickel are dissolved even under very favourable circumstances, he thinks there can never be any real danger of poison, though it is not advisable that eatables be kept for any length of time in such vessels.

Mr. Percival Smith.—As there is some doubt whether a recent decision of the General Medical Council has already come into operation, it will be better to make application to the Secretary to the Conjoint Board, Examination Hall, Victoria Embankment, W.C.

Mr. E. A. White is referred to our report on Filters in the first number of Vol. I. of THE LANCET for 1888.

M.R.C.S., L.R.C.P.—In Dr. Suzor's work on Hydrophobia (Chatto and Windus, 1887).

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Wilks, London; Mr. E. Owen, London; Dr. Buzzard, London; Sir Morell Mackenzie, London; Dr. Marshall, Nottingham; Messrs. Trollope Bros.; Mr. Clutton, London; Mr. Plumb; Messrs White, Druce, and Brown, London; Mr. E. Wyer, London; Dr. Kingham B. Page, New York; Dr. R. Dudfield; Mr. Best, London; Mr. Maitland; Mr. Sims, City; Mr. Godwin, London; Mr. H. Herbert, Liverpool; Mr. May, Ascot; Mr. T. Woodruff, Brighton; Mr. H. Coatsworth, Kensington; Mr. Dutton, Plymstock; Dr. Bastian, London; Messrs. Mitchell and Co., London; Dr. Dickinson, Stalybridge; Messrs. Entwistle and Kenyon, Accrington; Mr. Pickering, Fulham; Messrs. Longmans and Co., London; Mr. McCallen, co. Derry; Messrs. Christy and Co., London; M. Berthier, Paris; Mr. Reid, Leeds; Mr. Morrison, London; Mr. Weaver, Enniskillen; Mr. Thorn, London; Mr. Sampson, York; Mr. Chadwick, Liverpool; Mr. H. Cull, London; Mr. Noble Smith, London; Dr. P. R. Bradbury, Boston, U.S.; Messrs. Rayner and Cassell, London; Dr. Boobbyer, Nottingham; Messrs. Burroughs and Wellcome, London; Dr. L. Johnson; Messrs. Clarke, Son, and Platt; Mr. C. S. Jeaffreson, Newcastle-on-Tyne; Mr. A. J. Harvey, London; Dr. W. Brown, Stapleton; Dr. Shelly, Hertford; Dr. G. A. Wright, Manchester; Mr. H. K. Lewis, London; Dr. Goodall, Sheffield; Mr. Blackett, London; Mrs. E. Dean, Veytaux; Mr. Malcolm, Birmingham; Mr. P. Smith, Sirhowy; Mr. Lake, Barnes; Dr. A. Wallace, Colchester; Messrs. Dahl, London; Dr. Bryant, London; Mr. Love, Belfast; Mr. Sacker, London; Mr. Green; Messrs. Street and Co., London; Mr. Roberts, Sheffield; Mr. Dix; Messrs. Kilner Bros., King's-cross; Dr. Saul, Boscombe; Mr. Tirck, Innsbruck; Mr. Farrer, Slough; Herr Stössinger, Aachen; Mr. Northrup, New York; Dr. Moss, Penarth; Dr. Swann, Battley; Messrs. Wyleys and Co., Coventry; Dr. P. S. Abraham, London; Messrs. Wright and Co., Bristol; Dr. Willson, Woking; Dr. Milne, Dewsbury; Dr. H. Van Buren, London; Dr. D. V. Harris, London; Dr. A. Deane; Mr. Lindsay Johnson; Dr. Murray, Halifax; Dr. W. J. Collins, London; Dr. Lennox Browne, London; Mr. A. R. Anderson, Nottingham; Messrs. Grace, Bristol; Dr. S. Stephenson, London; Dr. Ward, Oxford; Mr. H. W. Allingham, London; Mr. White, London; Mr. Barlin, Stoke-upon-Trent; Dr. Squire, London; Dr. Collins, Manchester; Dr. Scriven, Derby; Dr. Walter, Manchester; Mr. Hawkings, London; Mr. Little, Welbeck-street; Mr. Pearson, Sheffield; Dr. Barraclough, Herne Hill; Mr. Silcock, London; Dr. Fitzgerald, Folkestone; Dr. Frederick Taylor, London; Mr. T. W. Christie, Liverpool; Messrs. Hornibrook, London; Dr. Finlay; Mr. Pooley, Bradford; Messrs. Burgoyne and Co., London; Dr. Tomlinson, Tooting; Mr. Ellerton, Brook Green; Mr. G. C. Wilkin, London; Mr. C. Forsyth; Messrs. Segg and Co., London; Dr. E. J. Maclean, Bristol; Messrs. Blondeau et Cie., London; Dr. Roche, Kingstown; Mr. Feeny, Beaulieu; Dr. J. Chambers, Paris; Mr. H. J. Waring, London; Dr. Jürgensen, Copenhagen; Mr. Tompsett, Anerley; Dr. McMordie, Belfast; Mr. Boehm, London; Dr. Nicholson, Hull; Mr. Crow, Canterbury; Mr. Vickers, London; Mr. Brew, co. Kerry; Mr. Evans, Oswestry; Mr. White, Bradford; R. S., Bridport; Autotype Company; M.R.C.S., L.R.C.P.; Oxford, London; Y.'s, London; Manzoni; Bristol Hospital for Sick Children; R. W.; Q.; P. M. B.; W. G., London; M., London; The Sanitas Company, London; Euonymin, London; Sanitas, London; Matron, Portsmouth; Omega, London; Gamba, London; Stockport Infirmary; Alpha, Manchester; W. T., London.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Craig, Wick; Mr. Woodman, Somerset; Mr. Mudd, Brighton; Mr. Cattle, Nottingham; Dr. Thomson, Ampthill; Mr. Tyte, Minchinhampton; Mr. Milligan, Manchester; Mr. Clements, Monmouth; Mr. Dunlop, Wisbech; Mrs. Pratt, Derby; Mr. Thorne, London; Mr. Thornburn, Cumberland; Dr. Toogood, Derbyshire; Miss Lush, Hemel Hempstead; Mr. Deacon, Manchester; Dr. Bonar, Bristol; Mr. Fleming, London; Mr. Nugent, Ireland; Miss Cobbe, Bristol; Messrs. Tonge and Briggs, Harrow; Mr. Hawkins, Woodstock; Mr. Casella, Holborn Bars; Mr. Coombs, Bridgwater; Mr. Hensley, Basingstoke; Dr. De Montbrum, Trinidad; Dr. Inriett, Bulgaria; Mr. Woodhead, Huddersfield; Mr. White, Devonport; Mr. Coulton, Devizes; Mr. Nicklin, Burnley; Mr. Smith, Cheltenham; Mrs. Pitman, Worthing; Mr. A. Brutton, Coldstream; Miss Robbs, Grantham; Rev. Mr. Field, Woodbridge; Mr. Storey, co. Leitrim; Mr. McCallen, Ireland; Mr. Gentle, Cumberland; Mr. Sowerby, Jarrow-on-Tyne; Dr. Dickinson, Stalybridge; Mr. Reynolds, Cambs; Mr. Gowdie, London; Mr. Stephenson, Ireland; Mr. Forrest, Colchester; Dr. Rhodes, Lancashire; Mr. T. Greenwood, Battersea; Messrs. Maclachlan & Stewart; Dr. Dickinson, Bow-road; Mr. Roberts, Sheffield; Mr. Holmes, London; Dr. Snow, London; Dr. O'Connor, Manchester; Mr. Hay, Salford; Mr. Griffith, Cumberland; Miss Grant, London; Dr. Key, Montrose; Mr. May, Staffs; Dr. Letters, Ireland; Mr. Wigg, Derby; Messrs. Heywood, Manchester; Mr. Shepard, Usk; Dr. Hanna, Lancs; Dr. Hubbersty, Somerset; Mr. Goodall, Sheffield; Mr. Eminson, Bawtry; I. S. D.; J. C., London; M.D., Hammersmith; R. M. F., London; Bradford Infirmary; Jacobus, London; Sea-bathing, London; Doctor, Bury St. Edmunds; Blister, London; M.D., Sunderland; Surgeon, South Wales; A. F., London; Hermes, London; O. S. W., Darwen; M.D., Portsmouth; X., London; Medical, Newcastle-on-Tyne; Medicus, London; Royal Hospital, Devonport; W. G., London; Alpha, Manchester; H. & R., London; A., London; Cives, London; Medicus, Devon; L. L., London; M.B., Aberdeen; W., Bradford; M. C. W., London; S. E. R., London; Peptones, London; Physician, Hampstead; Assistant, London; Dispenser, Fulham; Clavicle, London; Cosmo, London; Matron, Ventnor; The Doctor; Supt., Kensington.

Fruit Farm Review, The People's Journal (Aberdeen), County Council Gazette, Nationalist and Leinster Times, Weekly Free Press and Aberdeen Herald, Derbyshire Advertiser, Nottingham Daily Guardian, New York Herald (London), Derby and Chesterfield Reporter, Reading Mercury, Bradford Observer, Surrey Advertiser, Windsor and Eton Express, Hertfordshire Mercury, Clare Advertiser, Leeds Mercury, Daily Telegraph (Sheffield), Liverpool Daily Post, Metropolitan, Dundee Advertiser, Newcastle Daily Chronicle, Bristol Mercury, West Middlesex Standard (Ealing), Surrey Independent, Kilkenny Journal, Sunday Times, Kentish Gazette, Mining Journal, Evening Telegraph (Dublin), Bucks Herald, &c., have been received.

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